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County Council of Middlesex.

HORNSEY DISTRICT COUNCIL
ENGINEER'S DEPARTMENT.

REPORT

FOR THE

REC'D

10 FEB. 1902

YEAR 1901,

UPON THE

VITAL AND SANITARY CONDITION

OF THE

ADMINISTRATIVE COUNTY OF MIDDLESEX

BASED UPON THE

REPORTS OF THE DISTRICT MEDICAL OFFICERS
OF HEALTH, REGISTRAR-GENERAL'S
RETURNS, ETC.

London :

HARRISON AND SONS, ST. MARTIN'S LANE,
Printers in Ordinary to His Majesty.

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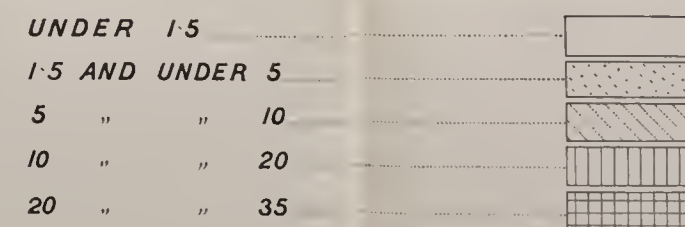
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R E P O R T

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OF HEALTH, REGISTRAR-GENERAL'S
RETURNS, ETC.

BY

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County Council of Middlesex.

TO THE CHAIRMAN AND MEMBERS OF THE
GENERAL PURPOSES COMMITTEE.

MR. CHAIRMAN AND GENTLEMEN, .

I have the honour to present the Report for the year 1901, upon the vital and sanitary condition of the Administrative County of Middlesex.

The Report has been unusually delayed by a number of causes. The smallpox outbreak considerably delayed the Reports from the Districts, a fact upon which stress is laid by most of the Medical Officers of Health. The new tables of the Local Government Board, which are much fuller and more numerous than the previous tables in use, have now been adopted by nearly all the Medical Officers of Health, and to cast these tables into County forms has occupied much time, so much so, that a large part of the extracting had to be destroyed and recommenced *de novo* on account of unforeseen complications, and now, when finally settled, the forms require twice as long to extract as formerly. The Registrar-General only recently published the census returns for Middlesex, and they were not obtainable until September. The census returns in the commencing year of the century are fuller than at any previous census, and as the figures only appear once in ten years, and are of special interest, I have thought it would be more acceptable to delay the Report a few weeks and present them in a concrete form the year in which they appear rather than delay them for another year.

The number of Annual Reports received from the Medical Officers of Health of the Urban and Rural Districts of the County was 29 and 4 respectively, corresponding with the number of Urban and of Rural Districts. All the 33 Reports were printed, except that of Greenford, which was type-written.

The tables of vital statistics supplied by the Local Government Board, in the new form, appeared in or accompanied nearly every Report. It is to be hoped that for the sake of accuracy and uniformity—two essential qualities in statistics—the Local Government Board's tables will always appear in every Report in future years.

The tables as to sanitation supplied by the County Council were appended to nearly all the Reports, either in full or abbreviated, in manuscript or in print. In a few instances, different forms of classification were adopted, rendering extraction difficult.

The administrative table, showing the Adoptive Acts, Bye-laws, and Regulations in force in each of the Districts of the County, still remains incomplete.

The tables in the text relating to the notification of infectious diseases, isolation hospitals, ambulances, and disinfecting chambers have been brought up to date.

The map prefacing the Report shows graphically the density of population in each of the Districts of the County.

After detailing the results of the census of 1901, the rest of the Report, as in previous years, has been divided into three parts: the first relating to the County as a whole, the second consisting of summaries of the Reports of the Medical Officers of Health, and the third containing the statistical tables.

I have the honour to be,

Gentlemen,

Your obedient Servant,

JOHN F. J. SYKES.

40, Camden Square, N.W.

30th November. 1902.

CENSUS OF 1901.

COUNTY OF MIDDLESEX.

SUMMARY OF THE CENSUS RESULTS.

The Administrative County of Middlesex covers an area of 148,700 statute acres, which contained a population of 542,894 in 1891, and of 792,314 in 1901, an increase of 45·9 per cent. This increase is greater than that of any other County, Essex following with an increase of 41·2 per cent., and, at a long distance, Glamorgan with 28·4 per cent., and Surrey 24·0 per cent., whilst Lancaster only increased 16·9 per cent. and London 7·3 per cent. In the actual number of persons added to the population during the decennium, after London and Lancaster, Middlesex stands third amongst the 62 Administrative Counties, with Essex fourth, no other County showing an increase above 200,000, and of the remaining 58, only six showing an increase of over 100,000 in population.

The population of the Urban Districts of Middlesex has increased from 501,470 to 741,149, a percentage increase of 47·8; and of the Rural Districts, from 41,424 to 51,165, a percentage increase of 23·5.

“The total number of separate tenements in the Administrative County, which had been 112,056 in 1891, rose to 165,974 in 1901, the increase being equal to 48·1

per cent. Of this total, the tenements containing five or more rooms increased from 70,496 to 103,318, equal to 46·6 per cent., while those with less than five rooms increased from 41,560 to 62,656, or 50·8 per cent. Stated in another way, the tenements with five or more rooms were equal to 62·9 per cent. of the total tenements in 1891, and decreased to 62·2 per cent. at the recent census, while the percentage of the tenements with less than five rooms increased from 37·1 to 37·8. The number of one-roomed tenements, each containing more than two persons, decreased from 1,457 to 1,137; while the number of two-roomed tenements, each containing more than four persons, increased from 1,830 to 2,008; the number of three-roomed tenements, each containing more than six persons, from 1,355 to 1,873; and the number of four-roomed tenements, each containing more than eight persons, from 936 to 1,128."

Whilst the proportion of tenements with less than five rooms averages 37·8 per cent. of the total tenements in the County, the proportion ranges in the Urban Districts from 22·8 in Enfield, 23·9 in Ealing, and 24·5 in Twickenham, to 47·6 in Hendon, 49·4 in Acton, and 58·7 in Willesden.

The tables which follow explain themselves; those referring to the County are placed first, and those referring to the Districts follow on, and a number of interesting proportions have been calculated from the Registrar-General's figures, and set out in the tables.

Many of the Districts in the County have undergone changes of area during the decennium, so that it is not

possible to compare the results of the census of 1891 and 1901, except in regard to *population*, the populations of the Districts in 1891 having been re-adjusted by the Registrar-General, so as to apply to the new areas in the 1901 returns. From a comparison of the populations of the Districts, they have all increased between the census of 1891 and that of 1901. The greatest increase per cent. was in Wealdstone (141·8), followed by Willesden (87·4), Edmonton (84·8), Hanwell (70·0), Southall-Norwood (67·1), Harrow (64·5), Hornsey (61·8), and Acton (55·9), and the least increase per cent. was in Uxbridge Urban District (4·6), Hampton Wick (9·5), South Mimms Rural District (10·3), Brentford (10·4), and Sunbury (10·8). The increase of persons per acre does not follow in the same sequence; the greatest increase of density was in Willesden (12·2), followed by Tottenham (10·3), Hornsey (9·5), Chiswick (6·2), Acton (5·8), Edmonton (5·5), and Wood Green (5·3), and the least increase in South Mimms (0·04), Greenford (0·06), Kingsbury (0·10), Hendon Rural District (0·12), and Uxbridge Rural District (0·14).

The number of inhabited houses per acre is greatest in Tottenham (5·4), followed by Hornsey (4·3), Chiswick (4·0), Wood Green (3·7), and Willesden (3·6), and least in Wembley (0·02), Greenford (0·05), Kingsbury (0·08), and South Mimms (0·09). The number of tenements per acre are in very similar sequence, showing that the type of houses, as to the number of dwellings contained, is much the same in the Districts quoted. The numbers of tenements per house show that the tendency to multiple dwellings in one house is greatest in the most closely populated parts and least in the most rural.

The density of population in the Districts is shown on the map prefacing this Report. The number of persons per acre is greatest in Tottenham (34·03), followed by Willesden* (26·19), Hornsey (25·06), Chiswick (23·86), and Wood Green (21·23), and naturally the least is in Rural Districts.

In the proportion of population per house and per tenement, public institutions are disturbing factors. For instance, in Friern Barnet, the London County Council Colney Hatch Asylum, with its 2,485 inmates and 265 officers; in Hanwell, the Central London District Schools, with 1,015 inmates and 563 officers; and in Southall-Norwood, the London County Council Hanwell Asylum, with 2,553 inmates and 282 officers; also in Harrow, the large public school, with its boarding houses, which the Registrar-General does not regard as a public institution, must largely influence the number of persons per house and per tenement.

COUNTY OF MIDDLESEX.

I.—ANCIENT COUNTY (EXTRA-METROPOLITAN) ADMINISTRATIVE COUNTY, AND REGISTRATION COUNTY.—AREA; HOUSES AND POPULATION, 1891 AND 1901.

County of Middlesex.	Area in Statute Acres.	Houses.			Population.		
		Inhabited.	Uninhabited.		Persons.	Males.	Females.
			In Occu- pation.	Not in Occu- pation.			
Ancient or Geographical County (Extra-Metro- politan)	149,668	{ 93,802 136,696 }	6,556 1,779	8,173	1,551 3,787	547,826 798,738	255,531 373,994
Administrative County..	148,700	{ 92,811 135,431 }	6,484 1,761	8,133	1,547 3,781	542,894 792,314	253,253 371,061
Registration County ..	178,606	{ 95,725 138,941 }	6,563 1,822	8,033	1,591 3,841	558,425 810,306	261,387 380,508
							292,295 424,744 289,641 421,253 297,038 429,798

COUNTY OF MIDDLESEX.

II.—DIFFERENCES BETWEEN THE ANCIENT, ADMINISTRATIVE, AND REGISTRATION COUNTIES OF MIDDLESEX.—INHABITED HOUSES AND POPULATION, 1901.

Civil Parishes.	Inhabited Houses, 1901.	Population, 1901.		
		Persons.	Males.	Females.
ANCIENT COUNTY (EXTRA-METROPOLITAN)	136,696	798,738	373,994	424,744
<i>Deduct</i> —(A) Parts of the Ancient County of Middlesex in the Administrative County of Hertford	1,265	6,424	2,933	3,491
ADMINISTRATIVE COUNTY	135,431	792,314	371,061	421,253
<i>Deduct</i> —(B) Parts of the Administrative County of Middlesex in the Registration County of Surrey	4,618	23,456	10,676	12,780
<i>Add</i> —(C) Parts of the Registration County of Middlesex in other Administrative Counties	8,128	41,448	20,123	21,325
REGISTRATION COUNTY	138,941	810,306	380,508	429,798

II.—Differences between the Ancient, Administrative, and Registration Counties of Middlesex.—Inhabited Houses and Population, 1901—*continued*.

Civil Parishes.	Inhabited Houses, 1901.	Population, 1901.		
		Persons.	Males.	Females.
(A) Parts of the Ancient County of Middlesex in the Administrative County of Hertford :—				
Hadley	105	486	240	246
Monken Hadley	273	1,441	645	796
South Mimms (Urban)	887	4,497	2,048	2,449
Total of (A)	1,265	6,424	2,933	3,491
(B) Parts of the Administrative County of Middlesex in the Registration County of Surrey :—				
Hampton	1,344	6,813	3,151	3,662
Hampton Wick	520	2,606	1,136	1,470
Teddington	2,754	14,037	6,389	7,648
Total of (B)	4,618	23,456	10,676	12,780

(c) Parts of the Registration County of Middlesex in other Administrative Counties:—

In the Administrative County of Essex—					
Waltham Abbey	..	..	..	1,311	3,400
In the Administrative County of Hertford—					
Arkley ..	..	..	..	98	238
Barnet Vale	..	..	..	352	738
Cheshunt	..	..	..	2,506	6,232
Chipping Barnet	..	..	..	488	1,441
East Barnet	..	..	..	1,289	3,260
Elstree ..	..	..	..	269	621
Hadley ..	..	..	..	105	240
Monken Hadley	..	..	..	273	645
Ridge ..	..	..	..	100	226
Shenley ..	..	..	..	321	745
South Mimms (Urban)	..	..	..	887	2,048
Totteridge	..	..	..	129	289
Total of (c)		..	..	8,128	20,123
				41,448	21,325
					3,149
					245
					1,076
					6,060
					1,452
					3,579
					702
					246
					796
					252
					764
					2,449
					555

COUNTY OF MIDDLESEX.

III.—ANCIENT COUNTY (EXTRA-METROPOLITAN).—POPULATION AT EACH SUCCESSIVE CENSUS, WITH INCREASE PER CENT. OF POPULATION DURING EACH INTERCENSAL PERIOD.

Census Year.	Population.	Increase per cent. during preceding intercensal period.	Census Year.	Population.	Increase per cent. during preceding intercensal period.
1801	70,889	—	1861	171,024	22·4
1811	83,531	17·8	1871	245,586	43·6
1821	98,656	18·1	1881	355,336	44·7
1831	112,434	14·0	1891	547,826	54·2
1841	130,653	16·2	1901	798,738	45·8
1851	139,739	7·0	..	..	..

COUNTY OF MIDDLESEX.

IV.—AGGREGATE NUMBERS OF MARRIAGES, BIRTHS AND DEATHS registered in the Registration County during the intercensal period 1891–1901; increase or decrease of population compared with difference between births and deaths.

[NOTE.—No correction is made in this Table for Deaths occurring in Public Institutions.]

Registration County.	Population.*		Registered from 1st April, 1891, to 31st March, 1901.			Increase of Population.	Excess of Births over Deaths.	Gain by Migration.
	1891.	1901.	Mar- riages.	Births.	Deaths.			
Census, 1st April, 1891 ..	574,999	825,876	} 42,363	195,277	101,224	250,877 (44·9 per cent.)	94,053 (16·8 per cent.)	156,824 (28·1 per cent.)
April, 1901 ..	558,425	810,306						
1901 ..	..	..						
Previous Census, 1891 ..	380,974	574,999	25,999	152,854	77,089	194,025 (50·9 per cent.)	75,765 (19·9 per cent.)	118,260 (31·0 per cent.)
1891 ..	..	..						

* [NOTE.—Changes were made in the boundaries of certain Registration Districts during the intercensal period. In the Table the total enumerated population of all such Districts for 1891 and 1901 are given, first for the Districts as constituted at the census of 1891, and then for the Districts as constituted by the changes. In calculating the increase of population, approximate allowance has been made for variations caused by changes of boundary. Owing to this method of calculation, the increase of population shown differs fractionally from that derivable from the figures for the entire County in other tables.]

COUNTY OF MIDDLESEX.

V.—ANCIENT COUNTY—(EXCLUSIVE OF THE REGISTRATION COUNTY OF LONDON), BIRTH-PLACES
OF PERSONS, CENSUS 1891 AND 1901.

	1891.	1901.	Increase.
Total inhabitants	564,400	798,738	234,338
Born in Middlesex	185,739	266,563	80,824
Born out of Middlesex	378,661	532,175	153,514
London	169,180	241,384	72,204
South-Eastern Counties	45,492	63,565	18,073
South Midland Counties (less Middlesex)	45,368	61,256	15,888
Eastern Counties	29,488	41,235	11,747
South-Western Counties	21,266	29,227	7,961
West Midland Counties	14,776	20,423	5,647
North Midland Counties	7,011	9,730	2,719
North-Western Counties	5,620	9,018	3,398
Yorkshire	5,331	7,728	2,397
Northern Counties	2,793	3,758	965
Monmouth and Wales	3,648	5,930	2,282
England (County not stated)	6,215	4,884	—1,331
Islands in the British Seas	609	910	301
Scotland	6,066	9,416	3,350
Ireland	5,834	7,616	1,782
British Colonies and Dependencies	4,275	6,241	1,966
Foreign Countries—			
British Subjects	1,158	3,540	2,382
Foreigners	4,409	6,160	1,751
At Sea..	122	154	32

(Decrease.)

COUNTY OF MIDDLESEX.

VI.—TOTAL TENEMENTS AND TENEMENTS OF LESS THAN FIVE ROOMS, DISTINGUISHING THOSE OCCUPIED BY VARIOUS NUMBERS OF PERSONS IN THE ADMINISTRATIVE COUNTY, 1891 AND 1901.

Administrative County.	Rooms in Tenement.	Tenements of less than Five Rooms.	Persons per Tenement.											
			1	2	3	4	5	6	7	8	9	10	11	12 or more.
Total tenements— 1891 = 112,056 1901 = 165,974	{ 1 {	*1891 = 4,998	2,193	1,348	760	400	180	69	26	12	8	2	—	—
		1901 = 5,795	3,039	1,619	753	274	83	22	3	1	1	—	—	—
	{ 2 {	*1891 = 8,513	1,201	2,332	1,788	1,362	866	493	284	120	54	8	4	1
		1901 = 12,006	1,690	3,501	2,863	1,944	1,066	527	286	96	27	5	—	1
Tenements of less than five rooms— 1891 = 41,560 1901 = 62,656	{ 3 {	*1891 = 10,973	548	2,266	2,237	1,949	1,529	1,089	671	411	189	61	15	8
		1901 = 19,593	776	4,372	4,710	3,597	2,574	1,691	1,013	536	225	74	17	8
	{ 4 {	*1891 = 17,076	455	2,351	2,858	2,911	2,592	2,220	1,639	1,114	602	224	72	38
		1901 = 25,262	540	3,651	4,697	4,799	4,076	3,013	2,108	1,250	698	286	97	47

NOTE.—This Table is to be read as follows :—Of the 165,974 tenements, 62,656 were tenements of less than five rooms, and of these 5,795 were tenements of one room, 12,006 of two rooms, &c. ; and of the 5,795 tenements of one room, 3,039 were occupied by one person each, 1,619 by two persons each, &c.

* In 1891, the tenements were abstracted for the Registration County ; in order to make the figures for that area comparable with those for the Administrative County in 1901, it has been necessary to make approximate adjustments.

COUNTY AND DISTRICTS OF MIDDLESEX.

VII.—ADMINISTRATIVE COUNTY, AND ITS SUB-DIVISION INTO URBAN AND RURAL DISTRICTS.—AREA, HOUSES 1901, AND POPULATION 1891 AND 1901.

HOUSES 1901, AND

20

Areas as constituted in 1901. (The 1891 figures have been adjusted to these Areas.)	Area in Statute Acres.	Houses 1901.				Population.				Civil Parishes.	
		Inhabited.	Uninhabited.		Build- ing.	1891.			1901.		
			In occu- pation.	Not in occu- pation.		Persons.	Persons.	Males.	Females.		
Administrative County	148,700	135,431	1,761	8,133	3,781	542,894	792,314	371,061	421,253	Same. { New & Old Brentford. Same. Same. Same. Same. Same. Same. Greenford, Perivale, and Twy- ford Abbey. Same.	
Urban Districts	88,105	125,204	1,621	7,675	3,622	501,470	741,149	346,087	395,062		
Rural Districts	60,595	10,227	140	458	159	41,424	51,165	24,974	26,191		
URBAN.											
Acton ..	2,305	6,086	95	359	131	24,206	37,744	17,029	20,715		
Brentford ..	1,091	2,914	47	79	19	13,738	15,171	7,505	7,666		
Chiswick ...	1,249	5,073	68	167	156	21,963	29,809	13,376	16,433		
Ealing (Borough)	2,947	5,991	132	312	265	23,979	33,031	13,017	20,014		
Edmonton ..	3,894	7,795	79	801	206	25,381	46,899	23,556	23,343		
Enfield ..	12,601	7,982	87	372	280	31,536	42,738	21,080	21,658		
Finchley ..	3,384	3,949	38	197	181	16,647	22,126	9,723	12,403		
Friern Barnet	1,304	1,559	19	85	54	9,173	11,566	5,075	6,491		
Greenford ..	3,041	162	1	12	—	660	819	429	390		
Hampton ..	2,036	1,344	12	38	11	5,822	6,813	3,151	3,662		

Hampton Wick	1,314	520	27	42	—	2,378	2,606	1,136	1,470	Same.
Hanwell	1,067	1,781	19	225	48	6,139	10,438	5,133	5,305	Same.
Harrow-on-the-Hill	2,028	1,893	29	127	75	6,210	10,220	4,752	5,468	Same.
Hendon	8,382	3,379	40	139	87	15,843	22,450	10,834	11,616	Same.
Heston and Isleworth.	6,859	5,684	68	282	92	26,004	30,863	15,083	15,775	{ Heston and Isleworth.
Hornsey	2,875	12,571	140	774	389	44,523	72,056	31,265	40,791	Same.
Kingsbury	1,829	140	—	1	—	581	757	390	367	Same.
Southall-Norwood	2,575	1,911	15	244	105	7,896	13,200	6,262	6,938	Same.
Southgate	3,597	2,818	42	166	155	10,970	14,993	6,799	8,194	Same.
Staines	1,918	1,367	22	57	13	5,535	6,688	3,390	3,298	Same.
Sunbury	2,659	938	24	41	3	4,099	4,544	2,185	2,359	Same.
Teddington	1,214	2,754	47	240	47	10,052	14,037	6,389	7,648	Same.
Tottenham	3,013	16,519	163	982	386	71,343	102,541	49,708	52,833	Same.
Twickenham	2,421	4,205	87	467	117	16,027	20,991	9,410	11,581	Same.
Uxbridge	868	1,922	61	57	10	8,206	8,585	4,102	4,483	{ Hillingdon West and Uxbridge.
Wealdstone	1,061	1,021	26	164	31	2,440	5,901	2,900	3,001	Same.
Wembley	4,564	833	7	101	29	3,023	4,519	2,163	2,356	Same.
Willesden	4,384	16,045	159	757	537	61,265	114,811	53,714	61,097	Same.
Wood Green	1,625	6,048	67	387	195	25,831	34,233	16,526	17,707	Same.
RURAL.										
Hendon	11,321	1,681	19	56	36	7,305	8,647	4,034	4,613	Note (1).
South Mimms	6,105	573	8	2	3	2,422	2,671	1,257	1,414	Same.
Staines	19,754	4,534	61	252	67	17,258	22,629	11,309	11,320	Note (2).
Uxbridge	23,415	3,439	52	148	53	14,439	17,218	8,374	8,844	Note (3).

Note 1.—*Hendon Rural District* comprises the parishes of Harrow Weald, Pinner, Edgware, Great Stanmore, and Little Stanmore.

Note 2.—*Staines Rural District* comprises the parishes of Ashford, Feltham, Hanworth, Laleham, Littleton, Shepperton, Cranford, East Bedfont, Harlington, Harmondsworth, and Stanwell.

Note 3.—*Uxbridge Rural District* comprises the parishes of Cowley, Hillingdon East, West Drayton, Yiewsley, Harefield, Ickenham, Ruislip, Hayes, and Northolt.

DISTRICTS OF THE COUNTY OF MIDDLESEX.

VIII.—AREAS IN ACRES, ENUMERATED POPULATIONS, DECENNIAL INCREASES AND INCREASES PER CENT., AND DENSITIES OF POPULATION PER ACRE, AND INCREASES OF DENSITY PER ACRE.

District.	Area in Acres.	Enumerated Population.				Density of Population per Acre.		
		Census, 1891.	Census, 1901.	Increase.	Increase per cent.	1891.	1901.	Increase per Acre.
URBAN.								
Acton ..	2,305	24,206	37,744	13,538	55·9	10·50	16·37	5·87
Brentford ..	1,091	13,738	15,171	1,433	10·4	12·59	13·90	1·31
Chiswick ..	1,249	21,963	29,809	7,846	35·7	17·58	23·86	6·28
Ealing (Borough) ..	2,947	23,979	33,031	9,052	37·7	8·13	11·21	3·08
Edmonton ..	3,894	25,381	46,899	21,518	84·8	6·51	12·05	5·54
Enfield ..	12,601	31,536	42,738	11,202	35·5	2·50	3·39	0·89
Finchley ..	3,384	16,647	22,126	5,479	32·9	4·91	6·53	1·62
Friern Barnet ..	1,304	9,173	11,566	2,393	26·1	7·03	8·87	1·84
Greenford ..	3,041	660	819	159	24·1	0·21	0·27	0·06
Hampton ..	2,036	5,822	6,813	991	17·0	2·86	3·34	0·48
Hampton Wick ..	1,314	2,378	2,606	228	9·5	1·81	1·98	0·17
Hanwell ..	1,067	6,139	10,438	4,299	70·0	5·75	9·78	4·03
Harrow-on-the-Hill ..	2,028	6,210	10,220	4,010	64·5	3·06	5·04	1·98

Hendon ..	8,382	15,843	22,450	6,607	41·7	1·89	2·67	0·78
Heston and Isleworth ..	6,859	26,004	30,863	4,859	18·7	3·79	4·50	0·71
Hornsey ..	2,875	44,523	72,056	27,533	61·8	15·48	25·06	9·58
Kingsbury ..	1,829	581	757	176	30·3	0·31	0·41	0·10
Southall-Norwood ..	2,575	7,896	13,200	5,304	67·1	3·06	5·12	2·06
Southgate ..	3,597	10,970	14,993	4,023	36·7	3·05	4·17	1·12
Staines ..	1,918	5,535	6,688	1,153	20·8	2·88	3·48	0·60
Sunbury ..	2,659	4,099	4,544	445	10·8	1·54	1·71	0·17
Teddington ..	1,214	10,052	14,037	3,985	39·6	8·28	11·56	3·28
Tottenham ..	3,013	71,343	102,541	31,198	43·7	23·68	34·03	10·35
Twickenham ..	2,421	16,027	20,991	4,964	31·0	6·62	8·67	2·05
Uxbridge ..	868	8,206	8,585	379	4·6	9·45	9·89	0·44
Wealdstone ..	1,061	2,440	5,901	3,461	141·8	2·30	5·56	3·26
Wembley ..	4,564	3,023	4,519	1,496	49·5	0·66	0·99	0·33
Willesden ..	4,384	61,265	114,811	53,546	87·4	13·97	26·19	12·22
Wood Green ..	1,625	25,831	34,233	8,402	32·5	15·90	21·23	5·33
RURAL.								
Hendon ..	11,321	7,305	8,647	1,342	18·4	0·64	0·76	0·12
South Mimms ..	6,105	2,422	2,671	249	10·3	0·39	0·43	0·04
Staines ..	19,754	17,258	22,629	5,371	31·1	0·87	1·14	0·27
Uxbridge ..	23,415	14,439	17,218	2,779	19·2	0·61	0·75	0·14
Urban Districts ..	88,105	501,470	741,149	239,679	47·8	5·69	8·41	2·72
Rural Districts ..	60,595	41,424	51,165	9,741	23·5	0·68	0·84	0·16
County ..	148,700	542,894	792,314	249,420	45·9	3·65	5·33	1·68

DISTRICTS OF THE COUNTY OF MIDDLESEX.

IX.—AREAS IN ACRES, INHABITED HOUSES, TOTAL TENEMENTS, POPULATIONS, AND INHABITED HOUSES PER ACRE, TENEMENTS PER ACRE AND PER HOUSE, AND POPULATIONS PER ACRE, PER HOUSE AND PER TENEMENT.

Districts.	Area in Acres.	Inhabited Houses.	Total Tenements.	Popula- tion.	Inhabited Houses.		Tenements.		Population.			
					per acre.	per house.	per acre.	per house.	per acre.	per house.	per tene- ment.	
URBAN.												
Acton ..	2,305	6,086	8,326	37,744	2·64	3·61	1·36	16·37	6·20	4·50		
Brentford ..	1,091	2,914	3,122	15,171	2·67	2·86	1·07	13·90	5·20	4·86		
Chiswick ..	1,249	5,073	6,430	29,809	4·06	5·15	1·26	23·86	5·87	4·63		
Ealing (Borough)	2,947	5,991	6,726	33,031	2·03	2·28	1·12	11·21	5·51	4·91		
Edmonton ..	3,894	7,795	9,017	46,899	2·00	2·31	1·15	12·05	6·01	5·20		
Enfield ..	12,601	7,982	8,618	42,738	0·63	0·68	1·08	3·39	5·35	4·96		
Finchley ..	3,384	3,949	4,604	22,126	1·16	1·36	1·16	6·53	5·61	4·80		
Friern Barnet..	1,304	1,559	1,856	11,566	1·19	1·42	1·19	8·87	7·41	6·23		
Greenford ..	3,041	162	179	819	0·05	0·06	1·10	0·27	5·05	4·57		
Hampton ..	2,036	1,344	1,461	6,813	0·66	0·71	1·08	3·34	5·07	4·66		
Hampton Wick ..	1,314	520	567	2,606	0·39	0·43	1·09	1·98	5·01	4·59		

Hanwell	1,067	1,781	2,024	10,438	1.67	1.89	1.13	9.78	5.86	5.15
Harrow-on-the-Hill ..	2,028	1,893	1,956	10,220	0.93	0.96	1.03	5.04	5.40	5.22
Hendon	8,382	3,379	4,397	22,450	0.43	0.52	1.30	2.67	6.64	5.10
Heston and Isleworth	6,859	5,684	6,072	30,863	0.82	0.88	1.07	4.50	5.43	5.08
Hornsey	2,875	12,571	15,571	72,056	4.37	5.41	1.24	25.06	5.73	4.62
Kingsbury	1,829	140	149	757	0.07	0.08	1.06	0.41	5.41	5.08
Southall-Norwood ..	2,575	1,911	2,026	13,200	0.74	0.78	1.06	5.12	6.91	6.51
Southgate	3,597	2,818	3,202	14,993	0.76	0.89	1.13	4.17	5.32	4.68
Staines	1,918	1,367	1,438	6,688	0.71	0.75	1.05	3.48	4.89	4.65
Sunbury	2,659	938	979	4,544	0.35	0.36	1.04	1.71	4.84	4.64
Teddington	1,214	2,754	3,049	14,037	2.27	2.51	1.11	11.56	5.10	4.60
Tottenham	3,013	16,519	21,910	102,541	5.48	7.27	1.32	34.03	6.21	4.68
Twickenham	2,421	4,205	4,634	20,991	1.73	1.91	1.10	8.67	4.99	4.53
Uxbridge	868	1,922	2,013	8,585	2.21	2.32	1.05	9.89	4.47	4.26
Wealdstone	1,061	1,021	1,208	5,901	0.96	1.14	1.18	5.56	5.78	4.88
Wembley	4,564	833	905	4,519	0.02	0.02	1.08	0.99	5.42	4.99
Willesden	4,384	16,045	25,657	114,811	3.66	5.85	1.60	26.19	7.15	4.47
Wood Green	1,625	6,048	7,426	34,233	3.72	4.57	1.23	21.23	5.66	4.61
RURAL.										
Hendon	11,321	1,681	1,705	8,647	0.14	0.15	1.01	0.76	5.14	5.07
South Mimms	6,105	573	577	2,671	0.09	0.09	1.01	0.43	4.66	4.63
Staines.. ..	19,754	4,534	4,597	22,629	0.22	0.23	1.01	1.14	4.99	4.92
Uxbridge	23,415	3,439	3,573	17,218	0.14	0.15	1.04	0.75	5.00	4.82
Urban Districts ..	88,105	125,204	155,522	741,149	1.42	1.76	1.24	8.41	4.77	4.76
Rural Districts ..	60,595	10,227	10,452	51,165	0.16	0.17	1.02	0.84	5.00	4.89
County	148,700	135,431	165,974	792,314	0.91	1.11	1.22	5.33	5.85	4.77

DISTRICTS OF THE COUNTY OF MIDDLESEX.

X.—TOTAL INHABITED HOUSES, TOTAL TENEMENTS, TOTAL TENEMENTS OF LESS THAN FIVE ROOMS, AND TENEMENTS OF ONE, TWO, THREE, FOUR, AND FIVE OR MORE ROOMS IN EACH OF THE URBAN AND RURAL DISTRICTS, 1901.

Districts.	Total number of inhabited houses.	Total number of tenements or families or separate occupiers.	Total number of tenements of less than five rooms.	Number of Tenements of				
				1 Room.	2 Rooms.	3 Rooms.	4 Rooms.	5 or more Rooms.
URBAN.								
Acton ..	6,086	8,326	4,117	612	716	1,512	1,277	4,209
Brentford ..	2,914	3,122	1,264	80	235	264	685	1,858
Chiswick ..	5,073	6,430	2,923	244	446	1,288	945	3,507
Ealing (Borough)	5,991	6,726	1,607	130	323	565	589	5,119
Edmonton ..	7,795	9,017	2,739	359	589	736	1,055	6,278
Enfield ..	7,982	8,618	1,964	143	347	393	1,081	6,654
Finchley ..	3,949	4,604	1,504	174	316	398	616	3,100
Friern Barnet ..	1,559	1,856	576	41	110	237	188	1,280
Greenford ..	162	179	102	1	15	30	56	77
Hampton ..	1,344	1,461	242	17	65	47	113	1,219
Hampton Wick ..	520	567	164	13	33	27	91	403

Hanwell ..	1,781	2,024	586	46	92	172	276	1,438
Harrow-on-the-Hill ..	1,893	1,956	481	6	39	65	371	1,475
Hendon ..	3,379	4,397	2,093	213	388	661	831	2,304
Heston and Isleworth ..	5,684	6,072	2,053	146	347	331	1,229	4,019
Hornsey ..	12,571	15,571	4,358	375	1,029	1,485	1,469	11,213
Kingsbury ..	140	149	60	1	13	15	31	89
Southall-Norwood ..	1,911	2,026	422	12	33	146	231	1,604
Southgate ..	2,818	3,202	816	44	164	225	383	2,386
Staines ..	1,367	1,438	341	17	44	58	222	1,097
Sunbury ..	938	979	410	19	33	41	317	569
Teddington ..	2,754	3,049	519	93	139	114	173	2,530
Tottenham ..	16,519	21,910	9,453	965	1,995	3,154	3,339	12,457
Twickenham ..	4,205	4,634	1,137	106	196	250	585	3,497
Uxbridge ..	1,922	2,013	603	48	107	71	377	1,410
Wealdstone ..	1,021	1,208	320	18	43	115	144	888
Wembley ..	833	905	224	12	53	67	92	681
Willesden ..	16,045	25,657	15,048	1,543	3,241	5,826	4,438	10,609
Wood Green ..	6,048	7,426	2,870	221	525	841	1,283	4,556
RURAL.								
Hendon ..	1,681	1,705	533	16	70	74	373	1,172
South Mimms ..	573	577	133	6	24	20	83	444
Staines ..	4,534	4,597	1,770	38	135	166	1,431	2,827
Uxbridge ..	3,439	3,573	1,224	36	101	199	888	2,349

PART I.—THE COUNTY.

CHAPTER I.—VITAL STATISTICS.

SECTION 1.—PUBLIC INSTITUTIONS.

Public institutions must be considered first, in calculating the vital statistics, on account of their disturbing influences.

The population, births and deaths in large hospitals, asylums and workhouses, not belonging to the County, or any District of the County, are altogether excluded. Schools and homes, and those hospitals, asylums and workhouses belonging to the County, or any District of the County, are, for the most part, included. The County Asylum is situated outside the County.

With regard to the workhouses of the Poor Law Unions, wholly or partly within the County, corrections are made in many of the Reports, especially in reference to deaths, but it is difficult to tabulate the statistics of the workhouses for want of information, as seen in the table below. At the census of 1901, the number of inmates in the Edmonton Union Workhouse, situated in Edmonton Urban District, was 714; in the Hendon Union Workhouse, situated in Hendon Urban District, was 309; in the Brentford Union Workhouse and Infirmary, situated in

Isleworth Parish of Heston and Isleworth Urban District, was 688; in the Staines Union Workhouse, situated in Stanwell Parish of Staines Rural District, was 250; of the Uxbridge Union Workhouse, situated in Hillingdon East Parish, of Uxbridge Rural District, was 213; of the Barnet Union Workhouse, situated in Chipping Barnet, Hertfordshire, was 242, and the workhouse of the Kingston Union is also situated outside the County, namely, in Surrey.

The Medical Officer of Health of Hanwell Urban District (Mr. J. Hope, D.P.H., &c.), remarks with regard to Public Institutions, that—"Large public institutions affect the general health and statistics of a local District according to the functions performed by such institutions. Here we have one devoted to the care, education, &c., of pauper children of several London Districts, numbering about 1,100. It is only natural to expect that certain so-called children's diseases should be found to flourish in such a favourable nidus, and in doing so the chief characteristic of such diseases, viz., their great potency for spreading to other children of susceptible age, should be found.

"As well as the above-mentioned institution, we have, not in our confines, but immediately the other side of our boundary, the large London County Council Asylum known as Hanwell Asylum. The majority of employées at this institution reside in this District. We are, therefore, considerably affected by any outbreaks of infectious or other diseases that may occur there.

"As far as possible, in the following Report I have borne in mind the above facts, and referred in detail to any cases connected with these institutions that may so require.

“Again, some of our inhabitants die away from their homes, either in London or other hospitals. Our infirmary and workhouse is in the District of Isleworth. I regret that although I have so frequently asked for details to be rendered annually, more especially from the latter institution, such has not yet been procurable.

“Your Council could easily arrange for this. The estimates or statistics would then be more accurate even than they have been. It is true that the number of deaths in the infirmary at Isleworth is generally small (for 1900 there were 8), but I would like to be able to state the facts to you on making my Annual Report.”

It has been pointed out that the best way to overcome the difficulty of distribution would be for each workhouse to issue, at the end of the year, a summary of its statistics, giving in the Local Government Board forms the figures as to population, births, deaths, and ages and causes of deaths, with regard to each Sanitary District of the Union stated as separate localities, and to supply each of these separate localities, or Districts, with a copy, and if the County Council were also supplied with copies of the Returns from all the Union Workhouses, a complete account of the statistics of Unions, stated separately and conjointly, could appear in the Annual Reports.

POPULATION IN PUBLIC INSTITUTIONS.

In the table below, and in the summaries in this Report, the populations will be found stated where recorded in the Reports of the Districts for the year.

BIRTHS IN PUBLIC INSTITUTIONS.

The number of births that have taken place in workhouses have been recorded where found stated in the District Reports.

DEATHS IN PUBLIC INSTITUTIONS.

Unless the whole facts are stated completely with regard to public institutions, namely, population, births, deaths, and ages and causes of deaths, and the necessary corrections made in the District Reports, it is difficult to deal with them in the completest manner, although the results may be regarded as approximately comparable.

COUNTY OF MIDDLESEX.

POOR LAW UNION WORKHOUSES AND THE DISTRICTS COMPOSING THE UNIONS.

WORKHOUSES AND DISTRICTS. (W = District in which Workhouse is situated.)	Daily average number of Inmates.	Births.	Deaths.	—
EDMONTON UNION WORKHOUSE ..	—	—	181	Stated in Edmonton U. D. Report.
Edmonton Urban District (W) ..	—	—	50	
Hornsey " " ..	—	—	—	
Wood Green " " ..	—	—	—	
Tottenham " " ..	—	—	—	
Southgate " " ..	—	—	—	
Enfield " " ..	—	—	—	
(Herts) Cheshunt Urban District ..	—	—	—	
(Essex) Waltham Holy Cross Urban Dist.	—	—	—	
HENDON UNION WORKHOUSE ..	129	48	67	} Outside the County. Stated in Hendon U. D. Report.
Hendon Urban District (W) ..	63	9	8	
Willesden " " ..	—	—	—	
Harrow " " ..	—	—	—	
Wealdstone " " ..	—	—	—	
Wembley " " ..	—	—	—	
Kingsbury " " ..	—	—	—	
Hendon Rural District ..	—	—	—	

Poor Law Union Workhouses and the Districts composing the Unions—continued.

WORKHOUSES AND DISTRICTS. (W = District in which Workhouse is situated.)	Daily average number of Inmates.	Births.	Deaths.	—
KINGSTON UNION WORKHOUSE	—	—	—	Outside the County.
Surrey Districts (W) ..	—	—	—	
Teddington Urban District ..	—	—	—	
Hampton " Urban District ..	—	—	—	
Hampton Wick Urban District ..	—	—	—	

SECTION II.—POPULATIONS OF THE DISTRICTS AND OF THE COUNTY.

As in previous Reports, the estimate of the population made by the Medical Officer of Health, with his local knowledge, has been taken as the basis for the statistics of each District, and collectively for the County.

SECTION III.—BIRTHS AND BIRTH-RATES.

The highest birth-rate per 1,000 of population occurred in Edmonton Urban District, 36·5, followed by Southall-Norwood Urban, 34·3; Brentford Urban, 33·9; Acton Urban, 32·0; Willesden Urban, 31·7; Wealdstone Urban, 31·3; Staines Rural, 30·6; and Tottenham Urban 30·0.

The lowest birth-rate occurred in Hampton Wick Urban District, 16·9; followed by Kingsbury Urban, 20·1; Hornsey Urban, 20·5; Hendon Rural, 20·6; and Ealing Borough, 21·2.

The birth-rates per 1,000 of population of the Urban Districts, the Rural Districts, the County, England and Wales, the 33 great towns, 67 other large towns, Regis-

tration London, and the outer ring of London, are set out in the following tables:—

Localities.	Estimated Population.	Births.	Birth- rates.
Urban Districts	741,561	21,064	28·2
Rural Districts	51,334	1,436	29·9
Administrative County ..	792,895	22,500	28·4
England and Wales ..	32,617,000	929,270	28·5
The 33 great towns ..	11,464,957	336,712	29·5
67 other large towns ..	4,090,362	122,005	29·8
Registration London ..	4,544,983	131,278	29·0
Outer ring of London ..	2,061,149	59,961	29·2

NOTE.—The figures for Middlesex in this and the following similar tables are taken from the Summaries in Part II, to which reference may be made as to what is excluded and included.

SECTION IV.—DEATHS AND DEATH-RATES.

The highest death-rate took place in Brentford Urban District, 17·2; followed by Southall-Norwood Urban, 16·0; Heston and Isleworth Urban, 15·7; and Edmonton Urban District, 15·0.

The lowest death-rate in Kingsbury Urban District, 6·6; followed by Hornsey Urban, 8·4; Wealdstone Urban, 8·5; and Wembley Urban District, 8·5.

The following table gives the death-rates per 1,000 of population in the Urban Districts, the Rural Districts, the County, England and Wales, the 33 great towns, 67 other large towns, Registration London, and the outer ring of London:—

Localities.	Estimated Population.	Deaths.	Death- rates.
Urban Districts	741,561	9,195	12·4
Rural Districts	51,334	650	12·6
Administrative County ..	792,895	9,845	12·4
England and Wales ..	32,617,000	551,316	16·9
The 33 great towns ..	11,464,957	212,572	18·6
67 other large towns ..	4,090,362	69,919	17·1
Registration London ..	4,544,983	79,924	17·6
Outer ring of London ..	2,061,149	27,455	13·4

SECTION V.—AGES AT DEATH.

The infantile mortality, or deaths under one year of age to every thousand births during the year, is an accurate test of the mortality of infants, because the correct number of births and deaths during the year are known as a

basis for the calculation, and it is one of the measures of the social and sanitary condition of a District.

The highest infantile mortality-rate was recorded in Brentford Urban District, 193; followed by Southall-Norwood Urban, 180; Acton Urban, 170; Edmonton Urban, 165; Heston and Isleworth Urban, 160; and Hanwell Urban District, 158.

The highest death-rate of infants occurred in Kingsbury Urban District, 62; followed by Hendon Rural, 67; Hornsey Urban, 84; Wembley Urban, 86; and Friern Barnet Urban District, 86.

The following table gives the infantile mortality-rates per 1,000 births, compared in the same localities as in the previous tables:—

Localities.	Births.	Deaths under 1 year.	Infantile Mortality per 1,000 Births.
Urban Districts	21,064	2,720	129
Rural Districts	1,436	178	124
Administrative County ..	22,500	2,898	129
England and Wales.. ..	929,270	140,711	151
33 great towns	336,712	56,508	168
67 other large towns ..	122,005	19,880	163
Registration London ..	131,278	19,611	149
Outer ring of London ..	59,961	8,362	139

In reference to infantile mortality, the Medical Officer of Health of Acton (Mr. G. A. Garry Simpson) writes—"The main causes of our infant mortality are:—

" 1. Epidemic diarrhœa.

" 2. Premature birth.

" 3. Overlying.

" 4. Improper feeding.

" 1. Epidemic diarrhœa was most prevalent during the months of July, August, and September. It was highly infectious, as one found it attacking one member of a family after another. It is also a fact that this summer diarrhœa appears regularly year after year in an epidemic form, and that it presents the same symptoms in each individual, and there must be common cause for it.

" More than 140 years ago Dr. Cullen wrote concerning the disease, 'that it arises in summer and autumn after great heat has prevailed, and especially after very dry states of the weather'; and he further says, 'that the effluvia from putrid animal substances readily affect the alimentary canal, and occasion upon some persons a diarrhœa.'

" I think there are four main channels in which these putrid emanations can reach us—milk, water, air, and insects.

" Milk, if used unboiled, may undergo decomposition, and will cause diarrhœa, especially in the young. We know that milk drawn from the cow in the morning will often, during the hot summer months, be quite turned by the afternoon, and milk in such a state will set up diarrhœa in some people, young or old.

“ If the milk is boiled it will keep much longer, but unless precautions are used in the storing of it, the danger will not be very much lessened. After being boiled, the milk should be kept in a closed vessel, and in a cool place, for, if it is kept uncovered, the dust, which is loaded with putrefactive germs, will fall into it. Dirty feeding bottles and teats are also undoubtedly often a cause of diarrhoea in infants that are bottle-fed.

“ *Water.*—Drinking water may be a cause of summer diarrhoea. During the hot summer months putrefactive changes are taking place all along our water courses; the banks of the reservoirs and streams are lined with vegetation, much of which is often in a state of active putrescence. The putrefactive gases are held in solution by the water, and are not removed by filtration, and if oxidation is not complete, the drinking of such water may cause diarrhoea.

“ *Air.*—During the hot summer months organic matter rapidly undergoes decomposition. The streets are also more or less covered with a layer of dust. This dust is composed of all manner of refuse in a state of active putrescence, one of the chief constituents being pulverized droppings of horses and cattle. This dust is taken into the lungs of old and young, and settles on all exposed food.

“ *Insects.*—During the summer months our living rooms are close and warm, and the open windows admit large numbers of insects, which have often come direct from feeding on the filthiest of decayed and decaying matter. The legs and bodies of the insects are covered with small particles of the filthy stuff, which they convey to the food.

“ 2. *Premature birth.*—Our chief industry is to a great extent responsible for the large number of premature births ; the long hours of standing at a wash-tub has a tendency to induce premature confinements.

“ 3. *Overlying.*—Is gross carelessness. In Germany and other countries it is made a penal offence to have a young infant in bed with its parents. A suitable cot can be made for a few pence out of an orange box or similar receptacle. It is a significant fact that nearly all the deaths from overlying take place between Saturday and Sunday. This is accounted for by the fact that the wife has to do her weekly shopping on Saturday night, and goes to bed late and tired out with her week's work.

“ 4. *Improper feeding.*—Every parent on registering the birth of a child is given full instructions as to quantity and suitable food to give a child brought up by hand.

“ In this District the mothers are at work the greater part of the day at the laundries, and the infants are left to the care of young girls or ignorant persons with the most rudimentary knowledge of infant feeding. The remedy, which I have before suggested, is to establish a crèche, where, for a small fee, the infants could be looked after and properly fed.

“ A leaflet giving instructions as to the importance of boiling the milk and the storage of food, is widely circulated during the summer months.

“ In the houses of the poorer class the household food is put in a cupboard, or simply exposed in the dwelling, or it may be a sleeping room ; in such cases as these the contamination of the food is almost certain to take place.”

In L.G.B., Table I, Part III of this Report, the births and birth-rate, deaths and death-rate, infant deaths, and infantile mortality rate, of each of the Districts in the County of Middlesex are set out separately; and in L.G.B., Table IV, the ages at death are also stated separately.

SECTION VI.—CAUSES OF DEATH.

As in previous years, it is desirable to set out the two classes of diseases known as the “principal zymotic diseases,” and the “scheduled notifiable infectious diseases,” in order to avoid error and to show what is embraced in each class and how far they coincide and differ:—

Principal Zymotic Diseases.	Scheduled Notifiable Infectious Diseases.
Smallpox Scarlet Fever Diphtheria and Membranous Croup Typhus Fever Enteric Fever Continued Fever	Smallpox Scarlatina or Scarlet Fever Diphtheria and Membranous Croup Typhus Fever Enteric or Typhoid Fever Continued Fever
Measles Whooping Cough Diarrhoea and Dysentery	Relapsing Fever Puerperal Fever Cholera Erysipelas

In the following table the deaths and death-rates from the principal zymotic diseases in each of the Districts of the County, Urban and Rural, are set out for the purpose of comparison.

ADMINISTRATIVE COUNTY OF MIDDLESEX, 1901.

Districts.	Estimated Population 1901.	Deaths from the principal zymotic diseases.	Zymotic Death- rate.	Notes.
URBAN.				
Acton	37,744	94	2·4	These figures are taken from the Summa- ries in Part II, to which reference may be made as to what is ex- cluded and included.
Brentford	15,163	57	3·7	
Chiswick	30,005	59	1·6	
Ealing (Borough)	33,274	28	1·2	
Edmonton	44,911	111	2·4	
Enfield	43,000	87	2·0	
Finchley	23,805	25	1·0	
Friern Barnet	8,816	16	1·8	
Greenford	919	0	0	
Hampton	6,850	8	1·1	
Hampton Wick	2,606	2	0·7	
Hanwell	10,757	14	1·3	
Harrow-on-the-Hill	10,540	23	2·2	
Hendon	21,953	34	1·6	
Heston and Isleworth	30,959	80	2·6	
Hornsey.. ..	73,500	40	0·5	
Kingsbury	757	1	1·3	
Southall-Norwood	10,477	33	3·1	
Southgate	15,200	20	1·3	
Staines	6,708	19	2·8	
Sunbury	4,619	6	1·3	
Teddington	14,029	12	0·8	
Tottenham	103,243	387?	3·7	
Twickenham	21,000	33	1·5	
Uxbridge	8,585	11	1·2	
Wealdstone	6,550	15	2·3	
Wembley	4,550	3	0·6	
Willesden	116,089	263	2·2	
Wood Green	34,350	70	2·0	
RURAL.				
Hendon	8,740	6	0·7	
South Mimms	2,671	4	1·4	
Staines	22,629	36	1·6	
Uxbridge.. ..	17,294	27	1·5	

In the Tottenham Urban District the 387 deaths from principal zymotic diseases appear to include a number of deaths from fevers in the hospital of the Metropolitan Asylums Board, at St. Ann's Road, otherwise the highest zymotic death rate occurred in the Brentford Urban District, 3·7; followed by Southall-Norwood Urban, 3·1; Staines Urban, 2·8, and Heston and Isleworth Urban District, 2·6 per 1,000.

In the Greenford Urban District no deaths occurred from zymotic diseases, and in the Kingsbury Urban only one death from this class of diseases, otherwise the lowest zymotic death rate took place in the Hornsey Urban District, 0·5; followed by Wembley Urban, 0·5; Hendon Rural, 0·7; Hampton Wick Urban, 0·7, and Teddington Urban District, 0·8 per 1,000 of population.

The deaths and death-rates from the principal zymotic diseases in the Urban Districts, the Rural Districts, the County, England and Wales, the 33 great towns, 67 other towns, Registration London, and the outer ring of London are set out in the following table:—

Localities.	Estimated Population.	Deaths from the principal Zymotic Diseases.	Zymotic Death-rate.
Urban Districts	741,561	1,551	2·09
Rural Districts	51,334	73	1·42
Administrative County ..	792,895	1,624	2·04
England and Wales ..	32,617,000	66,531	2·05
The 33 great towns ..	11,464,957	30,678	2·68
67 other large towns ..	4,090,362	9,184	2·24
Registration London ..	4,544,983	10,203	2·25
Outer ring of London ..	2,061,149	4,445	2·16

CHAPTER II.—INFECTIOUS DISEASES.

SECTION 1.—NOTIFICATION AND DISEASES.

(a.) *Notifiable Diseases.*

THE notification of infectious disease is in force in every District of the Administrative County. In the Willesden District compulsory notification has been in force since 1887 under a Local Act, but in all the other Districts the Infectious Diseases (Notification) Act, 1889, was adopted between 1889 and 1892. The date when notification came into force in each District is stated in the table below. The Act was in force in Sunbury in 1890, prior to its separation from the Staines Rural District; in Wealdstone and Wembley in 1891, prior to their severance from the Hendon Rural District; and in Kingsbury, prior to its severance from Wembley Urban District.

It will be observed that, prior to or in 1894, Friern Barnet, Hampton, Hendon, Heston and Isleworth Urban Districts, and Hendon Rural District, added measles to the notifiable diseases scheduled in the Act, and that Hendon Urban District also added whooping-cough; that the resolutions making these diseases notifiable were rescinded or expired in 1894 in the Heston and Isleworth Urban and the Hendon Rural Districts, and in 1896 in the Friern Barnet Urban, and Hendon Urban Districts; and that they were again adopted, in 1896, in the Friern Barnet Urban, and Heston and Isleworth Urban Districts, and again rescinded by the latter in July, 1901. In the number of cases notified and quoted in the third column of the table below, measles and whooping-cough have not been included.

To the table below is also added a column in reference to the Infectious Diseases (Prevention) Act, 1890, and a note made, when known, where adopted :—

NOTIFICATION OF INFECTIOUS DISEASES, 1901.

Districts.	Since when notification in force?	Cases of scheduled diseases notified.	Diseases added to those scheduled in Act.	Infectious Diseases (Prevention) Act adopted?
URBAN.				
Acton	Jan., 1890	172		
Brentford ..	Dec., 1889	77		
Chiswick ..	Jan., 1890	177		
Ealing (Borough)	Jan., 1890	181		
Edmonton ..	March, 1891	334		
Enfield	Jan., 1890	368	{ Measles, 1 month in 1898.	
Finchley	Jan., 1890	151	..	Yes.
Friern Barnet ..	Jan., 1891	119	{ Measles, Oct., 1894, for 2 years, and again added end of 1896.	Yes.
Greenford ..	1892	8	..	Yes.
Hampton ..	Nov., 1891	44	Measles.	Yes.
Hampton Wick ..	Feb., 1890	14		
Hanwell ..	March, 1890	134	..	Yes.
Harrow-on-the-Hill	1890	43		
Hendon	1891	139	{ Measles and whooping-cough, 1894, rescinded Dec., 1896.	
Heston and Isleworth	Jan., 1890	185	{ Measles, Feb., 1891, rescinded 1894, again added Sept., 1896, rescinded 16 July, 1901.	
Hornsey	Jan., 1890	725		
Kingsbury ..	..	1		
Southall-Norwood	July, 1891	85	..	Yes.
Southgate ..	Dec., 1889	108		
Staines	1890	83		
Sunbury	Jan., 1890	18		
Teddington ..	Feb., 1890	70		
Tottenham ..	1890	1,133		
Twickenham ..	Jan., 1890	159		
Uxbridge ..	Jan., 1890	77		
Wealdstone ..	1891	61		
Wembley ..	1891	13		
Willesden ..	Oct., 1887	1,106		
Wood Green ..	March, 1890	221		
RURAL.				
Hendon	1891	95	{ Measles, rescinded 1894.	
South Mimms ..	Feb., 1890	10		
Staines	Dec., 1891	92		
Uxbridge ..	Jan., 1890	104		

BACTERIOLOGICAL DIAGNOSIS.

The Infectious Diseases (Notification) Act, 1890, is facilitated in its working by the bacteriological examination of the throat secretions in diphtheria, and of the blood in typhoid fever; and amongst non-notifiable diseases, the diagnosis of phthisis is also facilitated by examination of the sputum.

In a number of Districts arrangements have been made for one or more of these forms of examination.

SMALLPOX.

In the Urban and Rural Districts of the County the number of cases of smallpox notified in past years have been 3 in 1897, 2 in 1898, 14 in 1899, 5 in 1900, and 157 in 1901.

Smallpox was prevalent in Paris throughout 1900 and 1901.

During the first seven months of 1901, sporadic cases of persons arriving from abroad occurred in London from time to time, and in August the cases began to multiply in number, continuing to increase till the end of the year and into 1902.

The Districts round London became infected, and in more than half the Urban and Rural Districts of Middlesex cases occurred, varying in number from single cases in Acton, Brentford, Ealing, to 49 in Tottenham.

As cases of modified smallpox were found to be mistaken from time to time for cases of chicken-pox, especially by the parents and relatives of patients, and as such unrecognised cases were found to spread the disease tenfold, chicken-pox was made a compulsorily notifiable disease in many of the Metropolitan Boroughs, and ultimately in all, and also in certain Urban Districts of the County of Middlesex, notably in Acton, Brentford, Chiswick and Hanwell.

It has been found, that of the doubtful cases of fever or eruption, that may or may not ultimately prove to be smallpox, but which it is important should be diagnosed in the earliest stages and be immediately isolated, about one-half are found by additional medical opinions upon the cases to be true smallpox, about one-quarter chicken-pox, and the other quarter to be distributed amongst a number of other diseases.

It has also been found that only about 25 per cent. of cases of chicken-pox are known to school teachers, and that compulsory notification brings to the knowledge of the Medical Officer of Health the other 75 per cent.

Further, it has been found that about 92 per cent. of cases of chicken-pox cases occur amongst children under 10 years of age, and can be referred to Vaccination Officers to ascertain whether they are vaccinated or not in accordance with the Regulations of the Local Government Board. The other 8 per cent., of which only 1 or 2 occur over 20 years of age, are fit subjects of inquiry as to re-vaccination by their medical attendants. Chicken-pox in adolescents and adults raises suspicion until confirmed absolutely by medical opinion.

Careful preliminary measures are most important in the discovery and recognition of smallpox, as it is well known that one unrecognised case of smallpox will often spread the disease directly and indirectly to ten, twenty, thirty or more persons. Each case of smallpox costs many pounds, whereas careful preliminary measures for preventing the spread of the disease do not cost as many shillings.

The personal cleansing and disinfection of contacts is also important, as the disease may be carried by the person and clothing, especially if the contact be close and prolonged, as in the case of members of an infected family or household. For this reason also, persons who handle dirty linen, particularly laundry employees, run special risks.

The attendants and staff employed about smallpox patients must be efficiently protected by vaccination, or, as experience has shown, they will very soon be incapacitated by the disease.

At a Conference of the Metropolitan Borough Councils held at the Metropolitan Asylums' Board on the 7th February, 1902, amongst other resolutions, the three following important opinions were agreed to :—

“ That it should be declared an offence to refuse or withhold information, or give false information with respect to persons living in a house in which smallpox has broken out, with regard to the names, employment, or occupation, schools attended by their children, or as to any persons not living in such house, but employed therein.”

“ That it is desirable to amend the law providing that, when a person inhabits any part of a house in which there has been a case of smallpox, and knowingly associates with other persons without having his own person and clothes cleansed and disinfected, he should be liable to a penalty.”

“ That an amendment of the law is necessary to ensure compulsory vaccination and re-vaccination of all persons (who have not been re-vaccinated within five years) in a dwelling-house wherein smallpox has broken out.”

Most of the Medical Officers of Health have written upon smallpox in their Reports, the following are a few of the comments :—

From Hampton Wick Dr. Th. Günther writes as follows—
 “ Up to the present time no smallpox has occurred in the District; should such unfortunately occur, we would have great difficulty in removing the patient to a smallpox hospital. It is impossible to find a place within this District for the erection of a temporary building. Various smallpox hospital authorities in the neighbourhood were approached to admit cases from this District, but were more or less unsatisfactory. The hospital at South Mimms may take a case provided there is room. I hope means can still be found to come to an understanding with a smallpox authority nearer home to deal with a case should such occur in the District. In the meantime the inhabitants ought to take the necessary precautions as regards vaccination and re-vaccination, and I am glad to report that a large number of persons have been re-vaccinated since the

epidemic began. The statistical returns from various countries about the smallpox death-rate in vaccinated and unvaccinated persons have all shown that vaccination is the best safeguard against an attack of smallpox, and the Registrar General's latest Report adds a further proof of the efficacy of vaccination. The Report deals with the number of deaths from the beginning of the present epidemic down to January 11th, 1902. The table shows that, out of those children and young persons under 20 years in the population of London who were not protected by vaccination, 100 have recently died from smallpox, whilst only four deaths from that disease have occurred amongst those of the same ages who were ascertained to have been vaccinated in infancy. There are also five cases in which the evidence was insufficient to warrant a definite statement as to vaccination. If the extreme course be taken of counting those five cases with the vaccinated, the figures will show at least 300 deaths from smallpox among the unvaccinated section of the population under 20 years of age, and, at most, nine deaths among the vaccinated section of the same age."

The Committee of the Metropolitan Asylums Board, in their Report in 1872 about smallpox and vaccination statistics, said—"The necessity of re-vaccination, when the protective power of the primary vaccination has to a great extent passed away, cannot be too strongly urged. No greater argument, to prove the efficacy of this precaution, can be advanced than the fact that, out of upwards of 14,800 cases received into the hospitals, only four well vaccinated authenticated cases were treated in which re-vaccination had been properly performed, and these were slight attacks. Further conclusive evidence is afforded

that all the nurses and servants of the hospitals, to the number of 300, were hourly brought into most intimate contact with the disease, who constantly breathed its atmosphere, and than whom none can be more exposed to its contagion, have, with but few exceptions, enjoyed complete immunity from its attacks. These exceptions were cases of nurses or servants whose re-vaccination in the pressure of the epidemic was overlooked, and who speedily took the disease; and one case was that of a nurse who, having had smallpox previously, was not re-vaccinated, and took the disease a second time.

“The percentage of deaths among the vaccinated was even much smaller in countries where not only vaccination but re-vaccination is compulsory. I may also here mention that smallpox has no consideration for age, and will attack persons advanced in years. During the present epidemic, up to December 31st, 1901, 100 per cent. of patients between 70 and 80 died, and 35 per cent. between 60 and 70.”

The Medical Officer of Health of Heston and Isleworth (Dr. E. G. Steegman), reports—“The most serious point to note in reviewing the various infectious diseases during the year, is the re-appearance of smallpox, after the District had been free from it for years. Five cases occurred, with two deaths. The first case notified was on September 25th. The patient and her new born baby were removed to the smallpox hospital at Dockwell on the same day, and although there were many people living in the same house, the only one who took the disease was a neighbour who had been in contact with the patient, and refused to be re-vaccinated. The existence of the smallpox hospital in the District has been of the greatest

advantage. The immediate removal of the patient, combined with energetic measures of re-vaccination of the contacts, and disinfection of the house, has prevented the spread of the disease in all but the one above-mentioned of the cases. The District is now reaping the benefit of the foresight of those who provided the hospital at a time when there was no immediate danger of an outbreak of smallpox."

Mr. B. Campbell-Gowan (Uxbridge Urban District), also reports—"Your Council is aware that an outbreak of smallpox occurred in your District. I have fully reported on the matter, and will only mention that there were at least two centres of infection, and probably three. One case came from Chesham to a common lodging house in Bell Yard, the origin of the other was unknown, but some of the navvies in the District were infected. Fortunately, the outbreak has been checked, but we must expect to have cases occurring from time to time, imported from London, as there appears to be little doubt but that we are on the eve of a serious epidemic of the disease. In London, in 1900, only four deaths took place from this cause, while in 1901, there were 1,017 cases and 247 deaths. Fortunately, your District has a large percentage of vaccinated persons, and many have been re-vaccinated and are thus protected, for in the epidemic of 1871, of nearly 15,000 cases in London, there were only four cases among efficiently re-vaccinated persons. While even in persons only once vaccinated, the protection from death is marked; in London, in 1901, the mortality per cent. of cases is:—

“Under 20 years of age—vaccinated, 1·87; unvaccinated, 49·07.

“Over 20 years - vaccinated, 17·5; unvaccinated, 57·5.

“Of 2,198 persons employed among smallpox, and re-vaccinated, there were only 17 persons contracted smallpox; of these 13 were not re-vaccinated until they had come on the ship, and 4 were workmen who had escaped medical observation. One may ask, if it is not vaccination that protected the others, what was it? Moreover, this is the experience of every outbreak of smallpox all over the world. The emergency smallpox hospital, erected by the Joint Hospital Board, has saved the District from a more severe outbreak, as it would have been quite impossible to isolate all the cases in private houses, especially, as in some instances, re-vaccination was refused.

“It would be a great improvement if the administration of the Vaccination Acts were placed under control of the Sanitary Authorities, they being sanitary preventive measures, and so coming more under the duties of your Council.”

Dr. Henry Kenwood, of Finchley, writes that—“Towards the end of the year the District suffered, in common with the Metropolis and the suburbs generally, from the outbreak of smallpox.

“The Council had been counting upon securing a few beds from the smallpox hospital at South Mimms, but towards the end of the year that hospital, which had been receiving patients from Districts even so far away as the South of London, became full. It was necessary then to make provision for isolation of smallpox patients in our own District. At the end of December, there were only 3 con-

valescent scarlet fever patients in the hospital, so it was decided to remove these and to thoroughly disinfect the hospital and admit smallpox patients to it.

“The District Council had some years previously laid down a concrete foundation, and thoroughly prepared a site for the erection of a superstructure in the event of Finchley patients requiring isolation whilst suffering from smallpox, so that it was decided to immediately proceed with the erection of the superstructure when, in my opinion, circumstances seemed to make such a step desirable. The Hornsey District Council at this time had also to face the difficulty of isolating two cases of smallpox, and they sought to make terms with the Finchley Council for the conjoint use of the provision which we were able to make. As a result of this, the two Districts came to an agreement which has proved, and will continue to prove, a great advantage to both Districts.

“The Hornsey Council agreed, at their own expense, to erect and furnish a temporary building for the reception of 16 cases of smallpox, on the existing foundations previously alluded to; in return for which privilege, they were to be entitled to send to the hospital 12 patients from the Hornsey District at one time. The Finchley Council were to maintain such patients, and to provide the necessary and efficient nursing and medical attendance, on terms agreed upon, for at least nine months. In return for this, the Finchley Council were allowed to send patients, not exceeding 16 at a time, suffering from scarlet fever, diphtheria, or typhoid fever, to the large isolation hospital at Irish Corner, belonging to the Hornsey Council, for a period of one year and nine months, and the Hornsey

Council were to maintain and provide nursing and medical attendance for these patients on agreed terms. The arrangement entered into met with the cordial approval of the Local Government Board.

“The site of the hospital is most thoroughly isolated, and with the precautions which have been adopted, nobody is exposed to any risk of infection.

“The present accommodation at the two small hospital buildings amounts to 25 beds, of which the Finchley District has a sole right to 13.”

SCARLATINA.

The total number of scarlet fever cases notified during the year in the County was 3,461, as compared with 2,801, and 3,366 in the two previous years. The numbers varied considerably, but Tottenham and Willesden, the two Districts with populations over 100,000, had 596 and 553 cases respectively.

DIPHTHERIA AND MEMBRANOUS CROUP.

The total number of diphtheria cases notified during the year in the County was 1,438, as against 1,229 and 1,501 in the two previous years. The cases notified as membranous croup numbered 24, as compared with 25 and 34 in the two previous years. The total number of deaths from the two diseases was 225 as compared with 186 and 181 in the two previous years, showing that the type of disease was more virulent.

TYPHUS.

Six cases of this disease, with one death, were notified from Hanwell, and the Medical Officer of Health (Mr. G. Hope), reports—"With regard to the cases of typhus, these are the first cases of this disease that have occurred in this District for many years; I cannot find a record of any, they occurred in Graham Gardens. This disease is essentially a filth disease, due to overcrowding, and has occurred in this District just where I should have expected it, as I have pointed out before, the houses in this road are mostly empty, but those that are occupied are so overcrowded by several families living together, as they say, to make up the rent, which is very high, that a very insanitary state results—just favourable for a disease of this kind. Very prompt action was taken, and that our efforts were successful is shown by the fact that the disease did not spread to any adjoining house, all the cases were in one family, and you are aware of the steps taken at the time; that there was only one death is also a matter for congratulation, as the disease is generally as fatal, as it is difficult to prevent spreading in insanitary areas."

ENTERIC OR TYPHOID FEVER.

By referring to L.G.B. Table III (*a*), Part III, and dividing the estimated population of each District by 1,000, that is, by omitting the three last figures of the population, the figures that remain form at a glance a maximum limit of number; if the number of cases notified in a District is greater than this limit, 1 per 1,000, the prevalence of the disease must be regarded as excessive, if below half of this number, 0·5 per 1,000, the prevalence may be regarded as within bounds.

In three Districts the number of cases was appreciably in excess of this maximum limit, namely, Edmonton + 21, Friern Barnet + 18, and Tottenham + 25; whereas there were no cases in Hornsey, Kingsbury and Greenford.

CONTINUED FEVER.

Of this vague disease there were 5 cases, as compared with 4 and 3 in the two previous years.

PUERPERAL FEVER.

Of this disease 35 cases were known, as against 39 and 42 in the two previous years; and 15 deaths as compared with 21 in each of the two previous years.

ERYSIPELAS.

641 cases of erysipelas were notified.

CHOLERA.

No case of this disease was known.

PLAGUE.

In last year's Report, when plague was made a compulsorily notifiable disease, the Order of the Local Government Board, together with the Memorandum and an account of the procedure necessary in case of an outbreak, were fully set out.

A suspicious case of illness occurred at Willesden, which was notified as plague. The Medical Officer of Health of

Hendon (Mr. F. W. Andrew), reported upon the necessary precautions to be observed as follows :—

“Towards the end of May, a suspicious case of plague having occurred on the borders of the Metropolis, the Local Government Board realised that the Districts around the Metropolis might be the means of spreading plague, unless thoroughly prepared for it.

“Ample means had been provided in the Metropolis, for such cases, and arrangements had also been made for the reception of contact cases. It was with the view of ascertaining what outside Districts had done that the Medical Inspector from the Board paid Hendon a visit.

“The requirements of the Local Government Board were :—

- “1. Isolation of the affected persons in a suitable building.
- “2. Isolation of contact cases for a period of ten days.
- “3. Proper disinfection or destruction of all affected articles, and effectual disinfection of premises.
- “4. House-to-house visitation (in the event of a case occurring) with a view to ascertaining all unsanitary conditions and possible unreported and suspicious cases.

“I reported upon these matters to my Council, and urged the necessity for framing some scheme to meet these requirements. I suggested that a suitable building should be obtained, or that an iron building should be

erected in the hospital field, away from the other buildings, and that provision should be made for treatment of contact cases. It was decided that, should such cases occur, one of the houses in possession of the Council should be obtained, if possible, or the cases treated in a suitable tent upon the hospital field, and that the contact cases should also be housed in tents which the Council had already at their disposal. I am glad to say that no cases have occurred, or any of a suspicious nature."

Similarly the Medical Officer of Health of Chiswick, reported upon plague—"With the object of ascertaining to what extent we were prepared to deal with any cases which might occur in the District, one of the officials of the Local Government Board, attended in June, at the Town Hall. The Conference was attended by the Chairman of the Council, the Clerk and myself. It was considered that the probability of many soldiers returning from the Cape might be the means of importing the disease into this Country.

"The following points were discussed and arranged:—

"1. The disease to be made notifiable under the Infectious Diseases Notification Act.

"2. In the event of any doubt as to diagnosis, the Local Government Board would send a medical man, who had special experience of the disease in Hong Kong

"3. All cases would at once be isolated.

"4. All contacts would have to be taken charge of in a special house in an isolated situation, which your Council would endeavour to secure.

- “ 5. The rooms, &c , would be disinfected by formalin and chlorine, two most powerful and reliable disinfectants.
- “ 6. The Haffkines inoculation could be used as a prophylactic for those who should come in contact with a case.
- “ 7. Visitation of common lodging houses.
- “ 8. To warn all hospitals, local and otherwise.
- “ 9. Destruction of rats.

“ The latter are very liable to convey plague, and the first warning that the disease is incident is frequently deaths among rats, who, when infected with the disease leave their runs, appear dazed, and become seized with convulsions and speedily die. Many epidemics have been traced to rats, although in Glasgow the rats were not found to be infected by plague, either before or after the outbreak. It is by vermin in the coat of the rat that the infection is probably conveyed to man.

“ Parasites, such as fleas, bugs, and lice, acquire the bacillus through feeding on persons suffering from plague, or they may get it from clothing, bedding, &c., soiled by excretions.

“ 10. Removal of nuisances.

“ 11. House to house visitation.

“ A suspected case of plague was notified to me in October from the West London Hospital, and every precaution was taken as regards careful supervision of the wife and child of the patient at their home as contacts.

The case proved, fortunately, on pathological examination, to be simply one of enlarged glands, from which the patient had occasionally suffered."

Other Medical Officers of Health also reported in a similar strain.

(b.) NON-NOTIFIABLE INFECTIOUS DISEASES.

There are four diseases, namely, chicken-pox, measles, whooping cough, and mumps, which, not being compulsorily notifiable, may be impressed upon elementary school teachers as diseases to be notified to the Medical Officer of Health for the protection of their pupils and the recovery of their grants from the Education Department.

CHICKEN-POX.

Chicken-pox has already been mentioned in connection with smallpox. In a number of Districts this disease was made a temporary notifiable disease during the prevalence of smallpox.

MEASLES.

Judging by the number of deaths, measles appears to have been much less prevalent than in the previous year.

WHOOPING COUGH.

Little can be done by public authorities in cases of whooping cough, except by general advice by handbill or placard.

DIARRHŒA.

The number of cases of diarrhœa appears to have been about the average judging by the number of deaths.

Speaking of diarrhœa Mr. Henry Bott, Medical Officer of Health, Brentford, says—"Year by year I repeat the same warning and give the same advice, but it seems to me to fall on deaf ears, to be read and forgotten. If the simple precaution were taken by parents of boiling the milk as soon as it comes into the house, washing the feeding-bottle immediately after use, and keeping it in a bowl of cold water until again required. Also seeing that their drains are clear, and their closets properly flushed, my reports would be more cheerful reading, and there would not be this frightful loss of life from a disease which can certainly be checked by forethought and common sense."

CONSUMPTION.

The public interest in tuberculosis, and particularly pulmonary tuberculosis, has started a crusade against this disease that promises to materially reduce its prevalence.

In the fourth week of July the British Congress on Tuberculosis was held, and passed the following resolutions:—

1. The tuberculous sputum is the main agent for the conveyance of the virus of tuberculosis from man to man, and that indiscriminate spitting should, therefore, be suppressed.

2. That it is the opinion of this Congress that all public hospitals and dispensaries should present every patient suffering from phthisis with a leaflet containing instructions with regard to the prevention of consumption, and should supply and insist on a proper use of a pocket spittoon.
3. That the voluntary notification of cases of phthisis attended with tuberculous expectoration, and the increased preventive action which it has rendered practicable, has been attended by a promising measure of success, and that the extension of notification should be encouraged in all Districts in which efficient sanitary administration renders it possible to adopt the consequential measures.
4. That the provision of sanatoria is an indispensable part of the measures necessary for the diminution of tuberculosis.
5. That, in the opinion of this Congress, and in the light of the work that has been presented at its sittings, Medical Officers of Health should continue to use all the powers at their disposal, and relax no effort to prevent the spread of tuberculosis by milk and meat.
6. That, in view of the doubts thrown on the identity of human and bovine tuberculosis, it is expedient that the Government be approached and requested to institute an immediate inquiry into this question, which is of vital importance to the public health, and of great consequence to the agricultural industry.

7. That the educational work of the great national societies for the prevention of tuberculosis is deserving of every encouragement and support. It is through their agency that a rational public opinion may be formed, the duties of public health officers made easier of performance, and such local state legislation as may be requisite called into existence.
8. That this Congress is of opinion that a permanent international committee should be appointed (*a*) to collect evidence and report on the measures that have been adopted for the prevention of tuberculosis in different countries; (*b*) to publish a popular statement of these measures; (*c*) to keep and publish periodically a record of scientific research in relation to tuberculosis; (*d*) to consider and recommend measures of prevention. This Congress is further of opinion that all international and great national societies whose object is the prevention of tuberculosis should be invited to co-operate.
9. That, in the opinion of this Congress, overcrowding, defective ventilation, damp, and general insanitary conditions in the houses of the working classes diminish the chance of curing consumption, and aid in predisposing to, and spreading the disease.
10. That the following question be submitted for the consideration of the next Congress on Tuberculosis: The constitutional conditions of the individual which predisposed to Tuberculosis and the means by which they may be modified.

11. That, while recognising the great importance of sanatoria in combatting tuberculosis in all countries, the attention of the Government should be directed to informing charitable and philanthropic individuals and societies of the necessity for anti-tubercular dispensaries as the best means of checking tubercular disease among the industrial and indigent classes.

HANDBILLS CONCERNING INFECTIOUS DISEASES.

Concerning these, the Medical Officer of Health, Southgate, Dr. A. Sidney Ransome, reports—"Handbills giving instructions as to the danger of, and precautions to be taken to avoid, spreading infection in the cases of consumption, measles, and whooping cough (not being notifiable diseases) are always kept in readiness, and have been left at all houses where it came to my knowledge that these diseases were present, and, in the case of the two latter, have also been distributed at all other houses in the immediate neighbourhood. This is, I think, the best way of dealing with such diseases as these. The necessary knowledge as to where these diseases are present is supplied to me chiefly by the School Attendance Officer and the School Authorities. This system of notification by the School Attendance Officer and the School Authorities, instituted in 1898, continues to work satisfactorily."

SCHOOLS AND INFECTIOUS DISEASES.

In the Report for 1900, Chapter II, Section 2, page 59, headed "exclusion from school on account of infectious

disease," some of the difficulties and complexities in the protection of schools from this class of diseases were discussed.

In this Report, in Chapter III, under the heads of "Schools," below, are quoted some resolutions passed by the Incorporated Society of Medical Officers of Health recently in reference to infectious diseases, and the hygienic and sanitary condition of schools.

SECTION 2.—ISOLATION AND HOSPITALS.

The accompanying table, brought up to date, shows the details of infectious hospital provision made in each District. The words "South Mimms" in the column headed "Smallpox Accommodation" refers to the smallpox hospital removed from Highgate to Clare Hall, South Mimms, the telegraphic address of which is "Variola, South Mimms."

In the quotations from the Reports of Medical Officers of Health it has not been found possible or desirable to separate the references to isolation hospitals for infectious diseases generally from those referring to isolation hospitals specially for smallpox.

ISOLATION HOSPITALS.

DISTRICTS.	Since when?	Where situated.	No. of Wards.	No. of Beds.	Diseases admitted.	Smallpox accommodation.
URBAN.						
Acton ..	..	Friar's Estate purchased .. Clay Ponds Lane	..	..	..	20 beds, South Mimms. To South Mimms.
Brentford (no charge)	Feb., 1892..	..	4	10	Scarlet Fever	..
Chiswick..	Site purchased 1884	Plans submitted to L.G.B. .. Near southern boundary	..	..	..	7 beds, South Mimms. To South Mimms.
Ealing (Borough)	..	..	extended	increased	All infectious diseases	..
Edmonton ..	None	Beds reserved at Enfield	..	14	..	4 beds, South Mimms. South Mimms.
Enfield ..	Feb., 1900..	World's End ..	3 blocks 1 block	54 2	Scarlatina, Diphtheria, and Enteric Fever	5 beds, South Mimms.
Finehley ..	April, 1889	Summer's Lane	3	12	Smallpox ..	Other infectious diseases to Hornsey. To South Mimms.
Friern Barnet ..	None	Cases sent to Enfield, Finchley, Hornsey, or Southgate	..	..	..	..
Greenford ..	None	Cases sent to Ealing	..	..	Scarlet Fever	Joint with Hanwell and Ealing.

ISOLATION HOSPITALS—continued.

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DISTRICTS.	Since when?	Where situated.	No. of Wards.	No. of Beds.	Diseases admitted.	Smallpox accommodation.
Hampton ..	(?)	Tolworth, Surrey	6	26	All	Smallpox admitted.
Hampton Wick ..	None ..	..	..	..	..	To South Mimms.
Hanwell ..	None ..	..	..	..	..	Joint with Ealing and Greenford.
Harrow-on-the-Hill	Dec., 1894..	Newton Farm, Roxeth, (Typhoid and Diphtheria block required)	2	11	Such as M.O.H. directs	To South Mimms.
Hendon ..	1890 ..	Renter's Lane ..	{ 2 1	12 4	Scarlatina and Diphtheria	To South Mimms.
Heston and Isleworth (joint with Richmond)	July, 1898..	Mogden Lane ..	13 (?)	54 (?)	Scarlatina, Diphtheria, and Typhoid	Dockwell Lane Hospital, Heston, near Cranford.
Hornsey ..	..	Coppett's Road, Muswell Hill	12	(?)	Scarlatina, Diphtheria, and Typhoid Fever	To Finchley.
Kingsbury ..	None ..	..	..	..	..	To Willesden.
Southall-Norwood	New site, 3 acres, Mount Pleasant	Temporarily at Joint Hospital, Hillingdon, Uxbridge R.D.	..	..	Scarlatina and Diphtheria	Joint Hospital, Yeading, Uxbridge R.D.
Southgate ..	Site sanctioned	Buildings being erected	..	..	..	To South Mimms (5 beds).

ISOLATION HOSPITALS—continued.

DISTRICTS.	Since when?	Where situated.	No. of Wards.	No. of Beds.	Diseases admitted.	Smallpox accommodation.
Staines ..	None	..	..	..	..	To Stanwell, Staines R.D.
Sunbury ..	None	..	..	..	..	To Stanwell, Staines R.D.
Teddington	None	..	..	..	..	None.
Tottenham (no charge for minors)	March, 1894	N.E. Hospital, M.A.B., St. Anne's Road	..	100	Scarlet Fever	To South Mimms.
Twickenham ..	..	Cottage Hospital, near Sewage Works	..	..	Scarlet Fever, Provision for Diphtheria required.	
Uxbridge ..	..	Joint Hospital, Hillingdon, Uxbridge R.D.	..	..	Scarlatina and Diphtheria.	Joint Hospital, Yeading, Uxbridge R.D.
Wealdstone	None.					
Wembley	None	Send to Willesden.				
Willesden (no charge for residents)	Aug., 1892	Dog Lane, Stonebridge, near Neasden	..	44 beds, 20 beds & cots, and 12 beds.	Scarlet Fever, Diphtheria, and Typhoid Fever	Temporary Hospital, Kingsbury, 32 beds.

ISOLATION HOSPITALS—continued.

DISTRICTS.	Since when?	Where situated.	No. of Wards.	No. of Beds.	Diseases admitted.	Smallpox accommodation.
Wood Green ..	Plans prepared	Site obtained at White Hart Lane, and plans prepared	..	44 for scarlet fever and diphtheria.	Beds retained at South Hornsey Hospital.	14 beds, South Mimms.
RURAL.						
Hendon ..	In course of erection	Honeypot Lane ..	4	13	Scarlatina and Diphtheria to Watford and Hendon Hospitals.	Special Hospital near the Union, Stanwell.
South Mimms ..	None.			..	..	Joint Hospital, Yeading.
Staines ..	None ..	..	..	..	..	
Uxbridge ..	1882 ..	Joint Hospital, Kingston Lane, Hillingdon	6	20	Scarlatina and Diphtheria	

Mr. Henry Bott (Brentford Urban District), reports upon the value of the isolation hospital as follows—"The excellent work which has been done at the hospital still continues. All kinds of infectious diseases are admitted, and the results are most satisfactory. When the case of smallpox occurred in September, the hospital was cleared and the patient treated there, and was an inmate for 10 weeks. Nurse Ward has my entire confidence, and devotes all her energies to her duties, and the Assistant Nurse has worked to my entire satisfaction, and with different diseases in hospital at the same time, their responsibilities have greatly increased. The Council have this year generously added a bacteriological laboratory to the chemical laboratory which they provided some years ago. This will be a valuable aid to diagnosis, and should further tend to check the spread of infectious disease. The public library and schools have been notified of the houses in which infectious diseases have occurred, and in cases where the patient has been nursed at home. I believe this procedure has been beneficial, in several instances children from infected houses being sent from school, who would otherwise have been the centre of infection. Books from the library have also been disinfected or burned."

Dr. Henry Kenwood (Finchley Urban District), writes—"The subject of the provision of a new fever hospital for the Finchley District was very fully considered and dealt with during the year. As I stated in my last Annual Report, the old hospital is no longer suitable for the needs of the District. The Friern Barnet District Council having expressed their willingness to consider the desirability of a joint hospital for the two Districts, all particulars were

drawn out with reference to the planning and building of the hospital, its furnishing and its administration, on the assumption that the two hospital Districts would agree to combine. The scheme included a hospital with a provision of 43 beds, arranged as follows: Scarlet fever, 18 beds, 10 female and 8 male, and two ward rooms, one to hold two cots and the other one bed; diphtheria, 10 beds, 6 female and 4 male; enteric fever, 4 beds, 2 male and 2 female; emergency, 4 beds, 2 male and 2 female. The plans and particulars of the administrative block were designed to give accommodation for the following staff: One matron, two charge nurses, two assistants, two probationers, two ward maids, two servants, one ambulance man and male attendant, and one resident medical attendant.

“From the estimates supplied by Messrs. Tasker & Sons, the cost of the building worked out at nearly £16,000. In my opinion, the labour of the Sub-Committee appointed to go into this matter resulted in a very perfect and altogether excellent scheme of hospital construction. The plans prepared by Mr. Woodrow, the Chairman of the Committee, present many new features and cannot be improved upon. Although the new arrangement, as entered into with the Hornsey District Council, will have the effect of postponing what would otherwise have been the most urgent requirement for the District, the matter will of course have to be put in hand in the near future, so that the labours of the Committee have not been wasted.”

(This refers to the temporary arrangement with Hornsey with regard to smallpox, *see* previous extract of Finchley under the head of “smallpox” above.)

As to Wood Green Urban District, Mr. C. H. Conolly reports as to the provision of the isolation hospital, that—
 “The preliminary arrangements have been completed for the erection of the hospital on the site in White Hart Lane, but the sanction of the Local Government Board to borrow the necessary money remains to be obtained, before actual building operations can be commenced.

“The estimates provide for 44 beds for scarlet fever and diphtheria, at a cost of about £14,000 for buildings and furniture.

“The District Councils of Wood Green and Southgate are now considering the advisability of combining to provide a joint hospital for the two Districts, on the Southgate site in Tile Kiln Lane. By this arrangement, an economy would be effected in the fixed charges for the salaries and maintainance of the nurses and officials, in so far as only one permanent staff would be required instead of two. On the other hand, the conjoint hospital would not be large enough to secure any considerable saving in the cost of building, or those advantages in efficiency or economy of administration that should attend a hospital conducted on a large scale with a resident Medical Officer in charge.”

From Twickenham, Mr. W. Marston Clark reports on the cottage hospital, that—“By reason of the number of scarlet fever cases occurring in September, the Council, acting on my advice, provided further hospital accommodation by taking possession of a cottage in close proximity to the hospital. Owing to the increase of the outbreak, even this accommodation was found to be inadequate, further measures were immediately taken to combat against

what would have undoubtedly been a very serious epidemic by acquiring temporarily an uninhabited isolated house. The sound judgment of the Health Committee enabled me to cope with the difficulty and any further prospective emergency, not only of scarlet fever, but also of smallpox, which at that time was prevalent in London, and caused considerable anxiety.

“The Council has been cognisant, owing to the large increase of the population since the erection of the present cottage hospital, that further permanent provision should be made. A Report was submitted by me as to the position of the Council with reference to the isolation of all contagious diseases. As a result, enquiries were made by me respecting available sites suitable for the erection of an isolation hospital, and eventually a most eligible one was provisionally secured. An application will be laid before the Local Government Board for sanction to a loan for the purpose of providing a site and erecting a building which is much needed.”

The Medical Officer of Health of Wembley (Dr. C. E. Goddard) reports as to smallpox hospital accommodation—“At the end of last year, when it was felt that some arrangement should be made for any local case of smallpox, I corresponded with neighbouring Medical Officers of Health, and finally you agreed to an arrangement with the Willesden Council for the accommodation of any case of yours at their temporary smallpox hospital at Kingsbury. However, on the 15th of February of this year, I received a letter from the Willesden Medical Officer, which quite upset that arrangement, and so, having

to shift for ourselves, we have now made ready a cottage at Alperton, which we can use for the purpose. It is not an ideal infectious disease hospital, either as to site or accommodation, but it must serve till a more suitable site and building can be obtained, or until we can share with another neighbouring Council."

Mr. C. H. Butler (Wealdstone Urban District) reports as to providing an Isolation Hospital—"Two years ago I warned the Council that, with our rapidly increasing population and the erection of many flats and tenement houses, we might look for a considerable increase in the number of cases of infectious disease. Events have entirely justified my words. In new districts there must always be a great number of children who have never suffered from any infectious disease to which children are particularly liable. Consequently, when an outbreak occurs, there is abundant material ready to hand upon which the infection can propagate itself. We have now about 1,000 children attending the Board Schools, and this affords a great centre of possible infection, the influence of which it is very difficult to control efficiently. Parents should be most careful to call in medical attendance when any suspicious or unusual symptoms show themselves in any child attending school, and keep it at home until the nature of the illness is known. In three instances children were discovered in the peeling stage of scarlet fever, having received no medical attendance nor been subjected to precautions in the way of isolation or disinfection. The most diligent efforts on the part of the Sanitary Officers are useless against such culpable carelessness and ignorance as this.

“ The only satisfactory way of dealing with this matter will be to erect an isolation hospital of our own, to which each and every case, as it occurs, can be promptly removed. I have urged this year by year in seven Annual Reports because I have felt it to be an urgent matter. Many improvements have been originated and carried through during these years, but this one, which to my mind is one of the most pressing requirements of the District, remains to be done. It is satisfactory to know that a good site is under consideration with a view to purchase for this purpose, and I feel sure the Council will be carrying out the wishes of the majority of the ratepayers, and acting in the best interests of the District, by pushing on the matter as quickly as possible. Isolation at home cannot always be relied upon. Persons do not always appreciate the need for extreme carefulness in every little detail of this matter. Removal to the hospital of another authority is not always a satisfactory solution of the problem. Until our own isolation hospital is built and equipped we shall not be able to deal effectually with infectious cases occurring in this District.*

* * * * *

“ In a Report submitted to the Council in October last I called attention to the need for making local provision against an outbreak of smallpox, and the Council very wisely, taking a proper view of their responsibility in this matter, sanctioned the erection of a temporary hospital of eight beds. This has been done, and is now ready, suitably equipped with beds, &c., if the occasion for its use should arise, as I trust it will not.”

“ * On investigation it was found that the proportion of cases of infectious sickness occurring in flats was about 8 per cent., while, for ordinary single tenement houses it was only 2½ per cent.”

On the question of erecting a hospital for Chiswick, Mr. F. C. Dodsworth, Medical Officer of Health, is moving thus—"Possibly never has an institution of this kind been more needed than during the past year, with the large increase of small tenements let in flats, containing two families having a large number of children. The usual difficulties have been met with in order to carry out some means of isolation, and efforts have proved too frequently a failure. The plans, however, of our future hospital have been submitted to the Local Government Board, and we have reason to anticipate the erection of a suitable building, with all modern appliances, before another year has passed."

In Southall-Norwood (Dr. J. W. Windle), advance is being made also towards the provision of an isolation hospital—"The Council have appointed Mr. Lawrence to prepare plans for the isolation hospital, which is to be erected on the site of Mount Pleasant. He has furnished me with the following particulars: The site comprises three acres, and is situate on the north side, and approached by a carriageway from Mount Pleasant.

"The scheme provides for five blocks of buildings, viz.: Administrative mortuary and laundry, pavilion, isolation and discharging blocks, to be built at present with provision for two future pavilion blocks (the foundations of one of these to be built at once), two isolation blocks and lodge-keeper's cottage.

"The present buildings giving accommodation for 17 beds, and the future blocks giving another 34 beds, a possible total accommodation of 51 beds.

“The administrative block will contain a matron’s sitting-room, a nurse’s ditto, a doctor’s room with dispensary, lavatories, stores, kitchen and the usual offices on the ground floor. A matron’s bedroom and five bedrooms for nurses on the first floor, and two bedrooms for servants on the attic floor.

“This building is arranged for future additions as occasion may arise. The mortuary and laundry block will contain a mortuary and an ambulance shed, a laundry and wash-house fitted with a drying closet, a disinfecting building with a chamber for infected clothes, and another for disinfected clothes, and fitted with a Dr. Thresh’s apparatus.

“The pavilion block is arranged for 13 beds, and will consist of two large wards, each for six beds, an emergency ward for one bed, and a nurse’s duty room arranged between the large wards. The isolation block is arranged for four beds in two wards of two beds each, with a nurse’s duty room between. On the west side of this block a glass verandah will extend the whole length of the building. The discharging block will contain an undressing room and a dressing room, with a bath room between.”

Dr. C. H. Adamson also reports that, in the Edmonton Urban District—“A piece of land consisting of an area of 21 acres 16 poles has now been purchased by the Council for the purpose of erecting an infectious diseases hospital for the treatment of cases in the District. A portion of land, extending to 15 acres, is to be reserved for the hospital buildings, and the remaining 6 acres, with

a frontage to Hertford Road, is to be sold for building purposes, the price of such to be paid as part payment of the loan raised for the purchase of the entire area.

“The land is situated towards the northern boundary, and is easily accessible from all parts of the District. It is situated in the main road from London to Cambridge.”

The Medical Officer of Health of the Hampton Urban District (Dr. Wentworth Tyndale), reports—“I have to state that a site of seven acres have been purchased on the border of the District for the purpose of erecting an isolation hospital in the near future. Our tenure at Tolworth Hospital is approaching a termination, and, no doubt, steps will be taken to have our own hospital in readiness before that occurs.”

Of Friern Barnet, Mr. F. A. Spreat writes—“The District not being provided with an isolation hospital, arrangements have been made with surrounding authorities, Enfield, Finchley, and Hornsey, for a limited number of beds for scarlet fever and diphtheria.

“During the outbreak of scarlet fever in July and August, this provision was found to be inadequate, and, as will be seen in the paragraph headed scarlet fever, nurses were promised in cases where the accommodation was insufficient.

“The arrangements concluded in 1898 for the reception of smallpox cases at South Mimms Hospital have been renewed, and remain in force to March 1902, when fresh arrangements will have to be made. The question of the

provision of isolation accommodation is receiving the consideration of the Council.”

And from Teddington, Dr. Th. Günther reports, in reference to isolation and smallpox hospitals—“The negotiations with neighbouring authorities for making provision for the isolation of infectious diseases have led, at present, to no result.

“The more pressing need is at the present time the provision of temporary accommodation of smallpox patients. Many Districts in Middlesex are in the same difficulty as Teddington, and application was made by the various authorities to the Middlesex County Council to assist them in providing hospital accommodation. The County Council invited the various District Councils in Middlesex to send delegates to a conference at the Westminster Guildhall to discuss the subject. With the view of impressing on the Middlesex County Council the urgent need for providing, without delay, temporary tents or buildings for smallpox cases, your representatives, Dr. Marshall and myself, attended the meeting on January 21st. The delegate from Edmonton moved a resolution to that effect, but the Chairman ruled the temporary provision out of order on the ground that the Middlesex County Council had no power to spend money on temporary structures.

“At the adjourned meeting on February 18th, a motion was passed to divide the County of Middlesex into three Districts, and to provide each District with a permanent smallpox hospital.

“ This arrangement does not assist our District in the present difficulty, and your delegates did not pledge themselves to the scheme, but reserved their right to be heard at the final inquiry of the Local Government Board.”

AMBULANCES.

The accompanying table, brought up to date, shows the details of ambulance provision made in each District:—

AMBULANCES.

Districts.	Ambulance?	Since When?	Where kept?	Accommodation?	Type and Remarks.
URBAN.					
Acton	Yes	..	Shed, Acton Lane, Uxbridge Road.	..	Horse brougham.
Brentford ..	Yes	Aug. 1893	Town Meadow, High Street	2 patients ..	4 - wheeled cab, without upholstery.
Chiswick ..	Yes	1894	Fire Station, High Road	2 patients, 1 attendant	Usual type, horse driven.
Ealing (Borough) ..	Yes	1884	Isolation Hospital	Stretcher and seat	4-wheeled covered van, driven by horses.
Edmonton ..	Yes	1895	Sewage Farm ..	2 patients, 1 nurse	New horsed van, M.A.B. type.
Enfield ..	Yes	1885	Court House ..	2 recumbent, 1 sitting	Horsed vehicle, opening behind.
Finchley ..	Yes	1889	Hospital Grounds	2 cases ..	Horse brougham.
Friern Barnet ..	No	..	..	1 patient ..	Barnet Workhouse Ambulance, 6 miles away.
Greenford ..	No.	..	Isolation Hospital, Tolworth, Surbiton	1 patient, 1 nurse	1-horse brougham.
Hampton ..	Yes	..			
Hampton Wick ..	No.	..			
Hanwell ..	No.	..			
Harrow-on-the-Hill ..	Yes	..	Council's Depot ..	..	1-horse brougham.
Hendon ..	Yes	1879 & 1899	Hospital ..	1 recumbent, 1 nurse	Brougham type.
Heston and Isleworth ..	(?)	..	..	..	Infectious hospital is at Dockwell Lane, near Cranford.
Hornsey ..	Yes 2	..	{ Hospital, Coppett's Lane Depôt, Hornsey ..	(?)	For hospital.
				(?)	For smallpox only.

Ambulances—continued.

Districts.	Ambulance?	Since When?	Where kept?	Accommodation?	Type and Remarks.
Kingsbury ..	..	..	Joint Hospital, Hillingdon	..	M.A.B. type.
Southall-Norwood ..	..	..	Hillingdon (?)	(?)	
Southgate ..	Yes.	1896			
Staines.. ..	No.				
Sunbury ..	No.				
Teddington ..	No.				
Tottenham ..	Yes	1889	Coombes House, Road	1 patient, 1 attendant	1-horse, M.A.B. type, reserved for smallpox. Two new ones constructing.
Twickenham ..	(?)	..	..	..	Cottage Isolation Hospital is at Sewage Works.
Uxbridge ..	..	..	Iver, Bucks (?)	..	Joint Hospital is at Hillingdon, Uxbridge Rural District.
Wealdstone	No.				
Wembley	No.				
Willesden ..	Yes 2	1895	Hospital Grounds	1 patient, 1 nurse	New horse-brougham. Old reserved for smallpox.
Wood Green ..	Yes.	1896	(?)	(?)	
RURAL.					
Hendon ..	No.				
South Mimms	No.				
Staines ..	No.				
Uxbridge ..	Yes.	1895	Inspector's Residence	1 patient, 1 nurse	M.A.B. type.

SECTION 3.—DISINFECTION AND METHODS.

The following table, brought up to date, shows the provision made for disinfection in the Districts:—

DISINFECTING CHAMBERS.

Districts.	Since when ?	Where situated ?	Type.	Transport Charges. Remarks.
URBAN.				
Acton ..	Oct., 1894	Sewage Works ..	High pressure steam	Two hand-trucks. No charge.
Brentford ..	Feb., 1892	Hospital Grounds ..	High pressure steam	One hand - cart. Charge, 7s. 6d.
Chiswick ..	None.	Messrs. Chillcott & Co., of Willesden		Disinfect bedding.
Ealing ..	1882		Steam ..	Iron horse-cart at Northern Works. Charge a guinea.
Edmonton ..	1884	Hospital. Southern Boundary	Gas oven.	
Enfield ..	1882	Sewage Farm ..	Hot air oven (obsolete)	Two horse - conveyances. Charge rarely made.
Finchley ..	1887	Sewage Farm, Ponder's End	High pressure steam	Two horse-vans. No charge made.
Friern Barnet ..	1900		High pressure steam.	
Greenford ..	None	Send to Finchley.		Oven at Ealing Northern Works used. No charge made to occupiers.
Hampton..	—		Hot air ..	Bed - ambulance used for removal. Charge for horse hire only.
Hampton Wick ..	None.	Isolation Hospital, Tolworth		Ealing apparatus used at a fixed charge.
Hanwell ..	None			

Disinfecting Chambers—*continued.*

Districts.	Since when ?	Where situated ?	Type.	Transport Charges. Remarks.
Harrow-on-the-Hill ..	1898	Isolation Hospital ..	Steam	Harrow School has apparatus at School Laundry, Roxeth.
Hendon	None.			
Heston and Isleworth ..	1896	Hospital, Mogden Lane	High pressure steam	
Hornsey	Two	Hospital, Coppett's Lane	High pressure steam	Laundry attached.
		Dépôt, Hornsey ..	High pressure steam	Laundry attached, and vans.
Kingsbury ..				
Southall-Norwood ..	None.			
Southgate ..	None.			
Staines ..	None.			
Sunbury ..	None.			
Teddington ..	None.			
Tottenham ..	1896	Outfall Works ..	High pressure steam.	{ Two vans. No charge. Laundry proposed.
Twickenham ..	None.			
Uxbridge ..	None.			
Wealdstone ..	None.			
Wembley ..	None.			
Willesden ..	1895	Hospital Grounds ..	High pressure steam	Two horse-vans. No charge.
Wood Green ..	1893	Moat House ..	Low pressure steam..	Two hand-carts. No charge.
RURAL.				
Hendon ..	None.			
Staines ..	None.			
South Mimms ..	None.			
Uxbridge ..	1886	Hospital Grounds ..	Hot air. Brick oven.	For use of hospital only.

SECTION 4.—VACCINATION.

In the Report for 1900, it was pointed out that of the serums inoculated for preventive purposes, as distinguished from curative treatment, some were fleeting, protecting only for weeks, as diphtheria antitoxin; some were less temporary, protecting the individual for months, as antitetanus serum; and that one was more permanent, affording protection for ten or more years, as, vaccine lymph. But there is also another difference between these protective fluids in that the above-mentioned serums are organic products extracted from the blood and free from microbes, and that they act chemically, whereas vaccine lymph contains the presumptive micro-organisms of smallpox, passed through the calf and thus deprived of the power of transmitting infection aerially. A person inoculated with diphtheria or tetanus antitoxin does not acquire either of those diseases, but a person inoculated with vaccine lymph acquires a non-infectious form of smallpox in an extremely mild degree, known as vaccinia.

Nearly all the Medical Officers comment upon vaccination, and one or two give the vaccination returns for the District, as quoted in the Summaries in Part II, below. Most of the Medical Officers also refer in their Reports to the examination of school children, as to their condition of vaccination, and some refer to the difficulties attending this.

Under the head of "Smallpox" above in the Report, will also be found a number of remarks with reference to vaccination.

Dr. C. E. Goddard, Wembley Urban District, writes upon vaccination that—"There are several points with regard to vaccination which are not well understood or generally known.

"The vaccination of infancy will not last more than about 10 years, so that re-vaccination should be performed at that age, especially when exposure to infection is likely to occur, and when the primary marks are weak and ill-defined.

"The statistics of all epidemics of smallpox go to prove that not less than four good marks protect with safety and certainty. I regard it as now positively criminal to vaccinate in only one place, when it is well known to give so very little protection, the degree of protection being in direct proportion to the thoroughness of the vaccination.

"It is not generally known, with regard to smallpox, that the disease itself does not protect from a second attack after about 20 years. I heard from a Local Government Board physician, who attended the smallpox hospitals in London, that numbers of people have contracted smallpox a second time after 'fifty years of age, and that many of the cases have proved fatal, so that vaccination is necessary for all.

"One of the strongest proofs of the efficacy of vaccination is that none of the nurses at the smallpox hospitals have, for the past eight years, contracted the disease though in constant contact with it in its most malignant form, and none have ever died of the complaint.

“ I am sorry to say that the class here who would probably suffer most if smallpox comes to Wembley are, on the whole, badly protected by vaccination, and still appear unwilling to accept the best known preventive treatment. It is often too late to vaccinate when smallpox is actually in our midst, as the full protective power does not take effect till about fourteen days after the operation.”

Dr. Skinner issued the following handbill, and circulated it in Willesden :—

“ VACCINATION.

“ With a view to the prevention of smallpox, vaccination is strongly advised, and re-vaccination of all persons over ten years of age.

“ SMALLPOX.

“ The ravages of smallpox before the introduction of vaccination were terribly fatal and, where not fatal, most disfiguring. In Europe half a million of people lost their lives through it every year, and if the deaths from it now in England equalled the proportion of that time, there would be nearly 100,000 here every year.

“ Writers of those times have left vivid descriptions of its effects in the survivors ; such as ‘ leaving hideous traces of its power, turning the babe into a changeling at which the mother shuddered, and making the eyes and cheeks of the maiden objects of horror.’ ‘ In reflecting upon its ravages the mind revolts in horror.’

“Vaccination has so modified these terrors that it is difficult to realize what they were, but the unvaccinated are as liable now to such results as were the people of those times.

“VACCINATION.

“It has been proved that the value of this is in the way in which the operation has been done. There are some people very susceptible to attacks of infectious disease. Measles, scarlet fever, diphtheria, may attack the same person more than once, so may smallpox, and, that being so, it can be understood that a person may have smallpox after having been vaccinated, but the proofs of the protective power are very great. From 1876 to 1879, there were nearly 12,000 patients admitted into the smallpox hospitals; no case of smallpox was known to occur in any person who had been efficiently vaccinated and successfully re-vaccinated.

“In the smallpox hospitals of the Metropolitan Asylums Board there were 734 nurses and attendants employed: 79 of them had had smallpox, 645 were re-vaccinated before entering on their duties, leaving 10 who had not had the disease, or been re-vaccinated; the 10 all took smallpox, but not one of the others.

“What is efficient vaccination? Four distinct marks, each half-an-inch across. It has been proved by experience of over 10,000 cases, that if a patient with smallpox has four good marks, he is twenty-eight times more certain of recovery than an unvaccinated one; three good marks, he is eighteen times more certain of recovery than an unvac-

inated one; two good marks, he is twelve times more certain of recovery than an unvaccinated one; one good mark, he is ten times more certain of recovery than an unvaccinated one.

“The above remarks are earnestly recommended to the notice of the public. I strongly advise all parents to see that their children have good marks, and if not, to let them be done again. The protection loses its power gradually, and at the age of ten or twelve years every child should be re-vaccinated.

“Every adult who has not been re-vaccinated since childhood should be done at once. If that were efficiently carried out there would be no more smallpox.

“D. S. SKINNER,

“Medical Officer of Health.”

CHAPTER III. — SANITATION.

SANITARY WORK GENERALLY.

The tables of sanitary work, formerly styled Tables C (I, II, III, IV), now named “Sanitation” Table I, II, III and IV are compiled as in previous years, and appended in Part III of this Report.

The table of Adoptive Acts, Bye-Laws, and Regulations, formerly styled Table D, is also appended in Part III. This table shows, as far as can be ascertained from the Reports, the Adoptive Acts, Bye-Laws and Regulations in force in each of the Districts of the County.

INSPECTIONS.

Complaints.—In Sanitation Table I, it will be seen that in the first column in 26 of the 33 Districts the number of complaints is recorded, and that of the 6 remaining, 3 are Rural Districts.

Infectious Diseases Notified.—The second column shows the cases of infectious diseases dealt with. A more complete return of the infectious diseases notified appears in L.G.B. Table III (a).

Premises Periodically Inspected.—These are stated in 20 of the 33 Districts.

House-to-House Inspections.—These also are stated in 20 of the 33 Districts.

Total Inspections.—In 26 of the 33 Districts these are stated, and in most of these the number of inspections are shown as well as of re-inspections.

Letters, Notices, &c.—In all but a few Districts the details of clerical and legal work are recorded.

DWELLINGS.

In 25 Districts the numbers of premises cleansed and repaired are stated, and they are considerable. In 9 the numbers closed as unfit, in 6 the numbers re-opened after repair, and in 7 the numbers demolished; 2 underground dwellings were vacated.

Dwelling-houses.—The housing question continues to engage attention in many Districts, as the following quotations show :—

Dr. Sydney Ransome, Medical Officer of Health (Southgate), writes, upon the subject of Housing the Working Classes, that—“No houses were closed or demolished as unfit for habitation during the past year. It must not be inferred from this that there are no dwellings unfit for habitation. I inspected a block of cottages in Tile Kiln Lane, and condemned several of these, and this matter is receiving the attention of the Council ; there is also another condemned block of cottages at Church Hill, Wlnchmore Hill, which is also receiving the Council’s attention. Over and above these a number of old and unhealthy cottages still remain in parts of the district, many of which ought to be pulled down, and which would be straightway condemned except for the fact that there are no others for the occupants to go into, if this were done, which clearly shows the need there is in the district for the erection of sound healthy cottages at a reasonable rent.

“There is no more useful or necessary sanitary reform you could undertake than the erection of such, and I am glad to be able to report that the matter is receiving your earnest attention.

“Although you are met with great difficulties in obtaining suitable sites at a reasonable cost, yet I trust that your efforts will be vigorously pursued and soon attended with success.

“In the meantime, with regard to old existing cottages, owners could do a great deal more than is at present done

towards making this class of property more sound and healthy, by carrying out requisite repairs and cleansing more frequently than is now the case, without waiting for the sanitary authority to enforce the necessary measures which property owners ought to carry out on their own responsibility."

The Medical Officer of Health, Finchley (Dr. Kenwood), reports that—"There is a demand in the District for an increase in the number of suitable dwellings for the poorer parishioners, and the Council has a scheme in hand for doing something in the direction of meeting this want. The reason why Local Authorities and Private Companies are unable to build so as to let at cheap rates, are : The restriction of the bye-laws dealing with the new buildings, the increasing value of land, and the increased cost of labour and materials. Further, the Local Government Board insists that loans to Local Authorities must be paid within a maximum period of sixty years. The rule doubtless is good when applied to works of sewerage and such like, but so far as buildings are concerned, the period for which the repayment is to extend might justly be made commensurate with the life of the structure; while as regards the land, it is a question whether the loan might not be permanent as the land is always an asset which is likely to improve in value. There is one circumstance which may be taken for granted, and that is, to re-house the working classes anywhere in and near Central London, any schemes for this purpose must be rate supported.

"In the suburban areas, however, it may be questioned whether municipal interference is required. The latest scheme of the London County Council to acquire a large

area of land at Tottenham is not, in my opinion, a step which is likely to materially assist the people who really require assistance.

“The area is to be laid out in such a way, and the cottages to be built in such a manner that about 42,500 persons will be accommodated at a cost of over one and a half million sterling. The undertaking will no doubt prove to be remunerative, because it will attract the very best of the working-class population from the surrounding district, but it will do no more good to solve the difficult problem of the sanitary housing of the very poor than did their re-housing scheme at Shoreditch. The County Council would display a wiser discretion if it would first improve the means of communication from the suburbs to the centre by opening up and widening existing thoroughfares, and starting a really efficient service of electric trams to relieve our present congested railway services. The provision of suitable accommodation for a family at not more than five shillings a week is the urgent need at the present time, and, in my opinion, in London and the immediate suburbs that cannot be effected without some subsidy from the rates, and some expenditure in this direction would, I believe, be met by a corresponding reduction in the Poor, Police, and Sanitary Rates in the District. One matter which will have to be faced before long is the imposition of conditions on landlords when old private houses are converted into tenement houses. Houses built to meet the requirements of one family should not be allowed to be let in tenements without having the necessary structural alterations made. Many houses in Finchley, formerly occupied by single families, are now occupied as separate dwellings on separate floors, and

house as many as three or four families. It is impossible for the occupants to live in a decent or sanitary condition when each family has to use a common water-closet, scullery, wash-house, and dust-bin.

“The more one sees of public health work the more one is impressed with the fact that the problem of sanitation is essentially the problem of poverty, and that the two are very largely interchangeable terms. It is the poorest who are the worst offenders against sanitation, and this is not to be wondered at, having regard to their conditions and surroundings. Moral precepts and sanitary principles, which appeal as mere platitudes to those nursed in the lap of plenty, necessarily lose their significance in the crowded hovels occupied by the poorest section of the community. If the problem of how to render the poor less poor can be satisfactorily solved, then along with it will be solved one-half the sanitary problems of the day. Doubtless it must be to education that we must look chiefly for improvement, but it must be education of the right sort. It must be education that enlarges mind, strengthens judgment, and elevates character and aim. Whenever such a stage of education is reached, sanitation is easy.”

From Uxbridge Urban District, Dr. Charpentier writes :—
 “I have in previous Reports pointed out the greatest difficulty in your District, as in many others, is the housing question. It is, indeed, one of the most difficult questions of our time. It is a well-established fact that the mortality and sickness rate are both higher in direct proportion to the density of the population, as would be expected. Again, the mortality and sickness rate are much higher in houses without through ventilation, that is, either ‘back

to back' houses, or houses with only openings in front. The subjoined table shows this very clearly—

	Death Rate.	Consumption Rate.
No back to back houses ..	15·6 per 1,000	2·7
Back to back houses ..	21·1 „ „	3·4

“In our District are many such houses, yet in other respects they are not bad enough to condemn, nor would it be advisable to condemn them unless the inhabitants had other houses to which to go, which they have not at present; and your Inspector and I have frequently inspected them in order that they may be kept in as good a condition as possible. In a former Report I suggested to your Council that a representation should be made under the Housing of the Working Classes Act, but, so far as I have been able to find, this does not seem to meet the difficulty. Another point is one of cost. Many of the smaller houses are let at a rental of 3s. 6d. a week, and I am informed by those qualified to give an opinion that, owing to the increased cost of labour and material, it would be quite impossible to build new houses of a sanitary kind to be let at this figure. The result is seen in many of the newer houses in your District, the rent is from 6s. 6d. a week, and they are now shared by two families, that is, are being turned into tenement houses without being constructed for that purpose.”

Of the Rural District of Staines, Mr. C. Dwight Morris says—“The adoption of bye-laws must sooner or later be followed by erection of houses with reasonable rents where an artisan can get sufficient accommodation without

paying such a large proportion of his wages for rent alone.

“Old property will have to be condemned, and more suitable cottages erected, where a working man and his family may live under more hygienic conditions than is available at present.

“This is a problem which your Council must sooner or later have to consider, and the erection of artisans’ dwellings will form a part of the many duties with which you will have to deal. If not, overcrowding will most surely arise, with all its difficulties and dangers, more particularly in its health aspect.

“Decentralisation is an accomplished fact—at least as far as the metropolis is concerned—and the gigantic undertakings which are now being planned to deal with suburban traffic will very materially affect your District. Progress must be made, and we should not be behindhand in doing what is manifestly our duty, in rendering the lives of our wage-earning class both happy and comfortable.”

Underground dwellings.—The number of underground dwellings in Middlesex is probably not great. During the year two only are recorded as having been vacated.

Houses let in lodgings.—In only four Districts are the numbers stated of these houses registered, and the numbers are few, except in Hendon, where 300 are registered. In most bye-laws the class of tenement house to be registered is defined or limited by the rental, as the

rental may differ widely in different places. A better guide is the number of rooms in a dwelling, and the number of dwellings in a house; for instance, when the number of dwellings in a house equals the number of rooms, it means that they are all single room dwellings; when the number of dwellings is one-half the number of rooms, that they are all two-room dwellings, and so on, for three rooms, one-third, and for four rooms one-fourth. By inquiry as to the mode of occupation, as to the number of dwellings in each house, it is easy to classify the streets and houses, and, with the increased number of dwellings in a house or diminished number of rooms in the dwellings, and the increased number of persons in rooms, so the necessity for registration can be gauged.

Common lodging-houses.—In eight districts houses of this kind are registered, the greatest number (seven) being in Brentford, six in Tottenham, and four in Uxbridge.

Canal boat dwellings.—Brentford and Uxbridge are registration authorities, the former have 289, and the latter 324 registered. In most of the Districts along the line of the canal visits of inspection are made.

Moveable dwellings.—Most of the Districts appear to be troubled by caravans and tents, which seem to be moved on from one to the other.

SCHOOLS.

In Sanitation Table II, in 25 of the Districts the numbers of schools are stated, and in some the number and frequency of inspections.

In Chapter II, Infectious Diseases, in the earlier part of this Report, some remarks will be found under the head of Infectious Diseases and Schools.

The Incorporated Society of Medical Officers of Health, in view of the new Education Act, recently passed the following resolutions in reference to schools :—

1. That the hygienic control of public elementary and of other public schools should devolve on the Medical Officer of Health of the District.
2. That the Medical Officer of Health, or a Medical Practitioner acting under him, should be given entry and power to examine scholars on the same lines as laid down in the Eccles Corporation Act.
3. That the standard of cubic space in all schools should be raised to the maximum at present existing.
4. That a standard of purity of air in schools would be of great assistance.
5. That schools claiming grants should be required to produce a detailed report from the Medical Officer of Health, as to their sanitary condition on a form approved, showing that they are in a sanitary condition.
6. That the Medical Officer of Health should be required to record the action taken by his department in regard to schools, and to forward annually to the Board of Education such portions of his Report as relate to this subject

7. That the Board of Education should secure a skilled medical adviser to co-ordinate the sanitary regulation of schools, and to organise a code of preventive measures applicable to schools.
8. That school teachers should be instructed to notify to the Medical Officer of Health the occurrence of cases of alleged or of suspected infectious disease, and to furnish such other information as may reasonably be required by the sanitary authority. That it should further be obligatory on school teachers to carry out the requirements of the Medical Officer of Health as to the exclusion of suspected cases of infectious illness, subject to an appeal to the Board of Education.

FACTORIES AND WORKSHOPS.

Factories.—It must not be overlooked that the power of Sanitary Authorities extends to factories as regards nuisances (including water supply and drainage), refuse accumulation and smoke, as regards the discharge of solid and liquid refuse into streams, and also as to sufficient sanitary conveniences for both sexes.

Workshops.—In 18 Districts the numbers of workshops are stated, and also the numbers or frequency of inspection. Under the head of “Legislation,” further on in this Report, the new Factory and Workshop Act, 1901, and the additional powers conferred are there noted.

Laundries.—In 19 Districts the number of laundries is stated, and also the number of inspections. Laundries are of two kinds—steam laundries, which are factories, and

hand laundries, which are workshops. There are also laundries which do not come under the operation of the Factory and Workshop Act, 1901, as workshops, namely, those in which less than three persons dwelling elsewhere are employed, and these specially need inspection. The premises are often dirty and dilapidated, the work is carried on in the living rooms, and the class of linen received is usually very dirty.

Bakehouses.—In 27 Districts the number of bakehouses is stated, and in 23 the number or frequency of inspections. The new provisions with regard to underground bakehouses are noticed under the head of Legislation, Factory and Workshops Act, 1901, further on.

PUBLIC BATHS AND WASH-HOUSES.

There are a few casual references to these in the Reports.

PUBLIC OPEN SPACES.

Dr. Clothier, the Medical Officer of Health, Hornsey, writes that—"The open spaces in the District have been supplemented during the year by the addition of about 38 acres situated in the Parish of Hornsey, being part of the Alexandra Palace and Grounds. The total area of these Grounds is 188 acres, which cannot be built over, and, although the whole of it is not actually in Hornsey, yet the District must get the benefit of it as an open space. The other open spaces in the District consist of Finsbury Park of 120 acres, the Highgate Woods, namely, the Gravel Pit Wood of 69 acres and the Queen's Wood of

50 acres, and the Pleasure Grounds of about 9 acres situated in the Hornsey Ward. These spaces altogether amount to about 286 acres, and must be of incalculable benefit in helping to purify the air, which must of necessity be more or less vitiated by the presence of over 13,000 houses with a population of 73,500."

SLAUGHTER-HOUSES.

The number of slaughter-houses is stated in 27 Districts, and the amount of inspection in 25.

COWSHEDS, DAIRIES AND MILKSHOPS.

In 26 Districts the numbers of these are stated, and the amount of inspection.

As to dairy-farms, the Medical Officer of Health, Hendon (Mr. F. W. Andrew), reports that:—"There are 11 dairy farms in the District, as against 12 last year. They are all registered and are in fair condition, some better than others.

"In addition, there is one farmer carrying on his business on the border of the Harrow Weald District at Bushey Heath, who keeps his own cows within our boundary line.

"He has recently made considerable improvements in his sheds, and has provided an efficient supply of Colne Valley water."

The Medical Officer of Health, Willesden (Dr. Skinner), says:—"Within the boundaries of the District there are eight dairy farms; these are principally of small proportions, the cows living chiefly in the open air during summer, and are generally found in a healthy condition.

"The number of farms is gradually decreasing, the District undergoing an alteration from rural character to one of bricks and mortar. The conditions are not such as to make the keeping of cows so profitable as when the country was more open, and the pastureage good.

"The farms are inspected annually, and as opportunities occur.

"A few are kept on model principals, and are all that can be desired, the others being of a more ancient date and not so satisfactory.

"There are 73 milkshops in the District, which were all inspected, and, with a few exceptions, found to be satisfactory."

Dr. Frederick Little says, with regard to cowsheds, that—"At Harrow-on-the-Hill, in my recent round of inspection, I regret to have to report that I noticed these are not so well kept as they have previously been. In several cases the sheds were ill ventilated, close and evil smelling. The floors were dirty, and they had evidently not been cleansed for some time. The state of the cows was deplorable, their quarters, hocks, tails, udders and teats were caked with dung, and it was manifestly impossible that they could be milked without some filth getting into

the milk. Although the milk is strained, and the larger particles removed, a considerable amount of deleterious matter must remain. This is highly dangerous to those who use milk largely, such as children, and every means should be taken to terminate this state of things.

“In my former Reports I have repeatedly recommended that classes of instruction for those employed in these places should be arranged for at the Technical School, and now that the new building is available, I earnestly hope that my suggestion will be promptly carried out. In order to reduce our infantile mortality to its proper level, the first essential is a wholesome milk supply.”

Milkshops.—It is acknowledged to be very objectionable to keep milk intended for sale in a room habitually used for sleeping or living purposes. There are a considerable number of milkshops in direct communication with a room at the back used as a bedroom, and in the cold half of the year the shop door is kept closed and the bedroom door leading into the shop open. Sometimes, in addition to communication by a door, there is also a window opening into the shop from the bedroom, and occasionally the separation between the room and the shop is still less defined.

It ought to be provided that there should be no direct aerial communication between a room used for sleeping purposes and a milkshop. This would not prevent the use of a fixed glazed window looking into the shop, if necessary, and would allow both the bedroom door and the shop inner door to open into a side passage ventilated into the open air by the front or back door of the house.

FOOD.

Unsound food.—In 9 Districts seizures of unsound food were made.

Diseased organs of food animals.—In the meat trade it is a common practice for slaughtering butchers to sell the offal, the price averaging in London 8s. or 9s. Bovine offal consists of the head, lights (or lungs), heart, liver, melt (or spleen), tripe (first stomach), peck (second or honeycomb stomach), runners (small intestine), and feet. All these organs or parts are used for human food, except the peck and runners. All these organs when diseased, or decomposed or stale, are often used for food for the lower animals, either in the cooked or uncooked state. All these organs, when not saleable either as food for man or for the lower animals, are sometimes used for manurial and other purposes.

The slaughtering butcher commonly sells his offal to the tripe-dresser, and tripe-dressers and some butchers not only sell food for man, but also food for the domestic animals, especially cats.

When is an inspector during slaughtering in a slaughter-house justified in seizing a diseased organ that in trade terms belongs to the “offal”?

Prima facie the bovine is slaughtered for the food of man, and if the slaughterer comes across a diseased organ it is open to him to at once ask the inspector to destroy it as trade refuse, confirming it by written request; and the inspector should always insist upon the request being put

into writing or signed for his own protection. If the slaughterer or butcher does not take this course, or intimate to the inspector that it is not intended for the food of man, or cast it aside, the inspector will seize it, and in order to justify his seizure and protect himself, will take the organ to a magistrate, obtain a condemnation order, and destroy it. Before a prosecution is commenced the circumstances of the case must be very carefully considered, especially whether the organ was intended for the food of man. The seizure of an organ, discovered in slaughtering, and before the butcher has hung it up, or cast it aside, or otherwise shown his intention, does not justify a prosecution.

So long as tripe-dressers and butchers, &c., kill and sell food for man and for the lower animals in the same slaughter-house on the same premises, and even in the same shop, and a different standard is allowed to prevail for the two classes of foods, so long will there be difficulty of proof.

Adulterated food.—In 3 Districts samples were taken under the Food and Drugs Adulteration Acts.

Regulations for Milk and Cream.—On the 29th January, 1900, the Board of Agriculture by Minute appointed a Departmental Committee to inquire and report as to what regulations, if any, might with advantage be made by the Board, under Section 4 of the Sale of Food and Drugs Act, 1899, for determining what deficiency in any of the normal constituents of genuine milk or cream, or what addition of extraneous matter or proportion of water, in any sample

of milk (including condensed milk) or cream, shall, for the purposes of the Sale of Food and Drugs Acts, 1875 to 1899, raise a presumption, until the contrary is proved, that the milk or cream is not genuine, and the Departmental Committee of the Board of Agriculture reported on the 16th January, 1901.

Since then the Board have issued the following Regulations with regard to the composition of milk:—

BOARD OF AGRICULTURE RULES (DATED
5TH AUGUST, 1901).

Sale of Milk Regulations, 1901.

The Board of Agriculture, in exercise of the powers conferred on them by Section 4 of the Sale of Food and Drugs Act, 1899, do hereby make the following regulations:—

- (1) Where a sample of milk (not being milk sold as skimmed, or separated, or condensed milk) contains less than 3 per cent. of milk-fat, it shall be presumed, for the purposes of the Sale of Food and Drugs Acts, 1875 to 1899, until the contrary is proved, that the milk is not genuine, by reason of the abstraction therefrom of milk-fat or the addition thereto of water.
- (2) Where a sample of milk (not being milk sold as skimmed, or separated, or condensed milk) contains less than 8·5 per cent. of milk-solids other than milk-fat, it shall be presumed, for the pur-

poses of the Sale of Food and Drugs Acts, 1875 to 1899, until the contrary is proved, that the milk is not genuine, by reason of the abstraction therefrom of milk-solids other than milk-fat or the addition thereto of water.

(3) Where a sample of skimmed or separated milk (not being condensed milk) contains less than 9 per cent. of milk-solids, it shall be presumed, for the purposes of the Sale of Food and Drugs Acts, 1875 to 1899, until the contrary is proved, that the milk is not genuine, by reason of the abstraction therefrom of milk-solids other than milk-fat or the addition thereto of water.

(4) These regulations shall extend to Great Britain.

(5) These regulations shall come into operation on September 1, 1901.

(6) These regulations may be cited as the Sale of Milk Regulations, 1901.

In witness whereof the Board of Agriculture have hereunto set their Official Seal this fifth day of August, one thousand nine hundred and one.



T. H. ELLIOTT,
Secretary.

Butter.—Since then the following Regulations have been issued in regard to butter :—

BOARD OF AGRICULTURE RULES (DATED
22ND APRIL, 1902).

Sale of Butter Regulations, 1902.

The Board of Agriculture, in exercise of the powers conferred on them by Section 4 of the Sale of Food and Drugs Acts, 1899, do hereby make the following regulations :—

- (1) Where the proportion of water in a sample of butter exceeds 16 per cent., it shall be presumed, for the purposes of the Sale of Food and Drugs Acts, 1875 to 1899, until the contrary is proved, that the butter is not genuine by reason of the excessive amount of water therein.
- (2) These regulations extend to Great Britain.
- (3) These regulations shall come into operation on the fifteenth day of May, one thousand nine hundred and two.
- (4) These regulations may be cited as the Sale of Butter Regulations, 1902.

In witness whereof the Board of Agriculture have hereunto set their Official Seal this twenty-second day of April, one thousand nine hundred and two.



T. H. ELLIOTT,
Secretary.

OFFENSIVE TRADES.

In each of 4 Districts there is an offensive trade, the premises of which are inspected from time to time.

MORTUARIES.

In 16 Districts there is mortuary accommodation. Mr. Dwight Morris, Medical Officer of Health (Sunbury-on-Thames), writes—"The new mortuary has been found a great boon to medical men having to perform post mortems.

"Dr. Gordon Hogg, the Coroner for the District, suggested that its usefulness might be extended to other Parishes which were without the accommodation, who might contribute a small yearly sum to your Council for such help in this direction, he having the power to order a body to be removed. The holding of inquests in your Council Chamber has been of great help to him in his inquiries."

BURIAL GROUNDS.

The disposal of the dead will be much facilitated by the Act to provide crematoria.

WATER SUPPLY AND WATER SERVICE.

Wells.—In the Staines Rural District, 17, and in Sunbury, 1, new wells were sunk.

As polluted, 8 are reported as being closed, of which 5 were in the Staines Rural District, but this does not represent the whole of the wells closed; in the five previous years the numbers closed were 14, 28, 54, 41, and 45.

Dr. F. C. Tothill (Staines Urban District), writes—"In my last year's report I referred to an outbreak of enteric fever in the Yeoveney district, which appeared to have been caused by drinking water from polluted wells. The wells were closed by order of the Council, and since then there has been no zymotic disease in this portion of the Parish, although the inhabitants have no water supply except what they can obtain from the River Colne."

Dr. Ridge, Medical Officer of Health, Enfield, reports that—"The water supply of the District has given some anxiety during the year. Through the sinking of some deep wells in the District for the supply of London, and partly, also, through the diminished rainfall, the yield of the wells at Ponders End has diminished. To make up for this, additional adits have been driven in the chalk, and fresh sources have been tapped, but the extra yield has not quite made up for the deficiency. As a result of the boring in the chalk, the water has had more or less chalk suspended in it for a considerable time. This, although not actually harmful, is not desirable. Arrangements are, however, being made to sink another well in another part of the District. The new water mains laid measure $2\frac{1}{4}$ miles, and 486 new houses have been supplied."

Mains.—It will be seen in the Sanitation Table III, Part III, that a very large percentage of houses are supplied from the mains of the Water Companies.

Regulations of the Water Companies.—At the beginning of the year the Water Companies deposited new regulations to amend the Regulations made in 1872, under the Metropolis Water Act of 1871. A public inquiry into these proposed new regulations was held by the Local Government Board in February, at Westminster.

On the 28th February, Counsel, on behalf of the Water Companies, made the following statement:—

“MR CRIPPS: I have to make a statement, Sir, which I think I will make at once for the convenience of all parties. These amended regulations were, as explained, brought forward to carry out the duty imposed on the Companies by the Act of 1871, to prevent the waste or abuse of water and its undue consumption or contamination, in reference to which duty the Royal Commission reported that the Companies had been remiss. As a matter of public convenience it was thought better to have one code, which involved some alterations in the existing regulations made in 1872. The proposed new regulations related especially to improved fittings, which in the practice of the New River Company had been found to work satisfactorily in the interests both of the consumers and the Company. The question which has excited most controversy is that of cisterns, these having been advised in the Report of Colonel Ducat and Dr. Barry, appointed by the Local Government Board in 1895, to hold an inquiry into the scarcity of water in the East London District, and emphatically recommended in the Report of the

Royal Commission, and the proposed regulations were framed to give effect to these recommendations. In face, however, of the opposition which the proposals have aroused from the various Local Authorities, owing, as the Companies think, in great part to a misapprehension of the objects sought to be obtained, the Companies propose to ask the Local Government Board not to further proceed with the present Inquiry. I make that statement at the outset to you and your colleagues, Sir."

DRAINAGE AND SEWERAGE.

Privies and water-closets.—A number of above-ground receptacles were substituted for pits, and of movable receptacles substituted for fixed, mainly in the Rural Districts and sparsely populated portions of the Urban Districts. In Hampton Wick and Heston and Isleworth, water-closets are being substituted for dry receptacles. The percentage of houses provided with water-closets will be seen, in sanitation Table III, to be getting very large, and of necessity adding to the difficulties of sewerage and sewage disposal.

Drains and sewers.—The number of cesspools being abolished increases year by year, and in sanitation Table III, the percentage of houses draining into sewers is increasing correspondingly.

Mr. F. W. Andrew reports from Kingsbury, in reference to drainage and sewerage, that—"Important alterations are about to be effected with respect to the drainage of

the District. At the present time the drainage is of the most primitive character, consisting as it does for the most part of badly constructed house drains, discharging into cesspools and ditches, the result of the overflow from such cesspools causing in hot weather considerable nuisance and contamination of the River Brent. The Thames Conservancy have raised frequent complaints as to these nuisances, and the Council were compelled to take measures to abate one of these nuisances, *i.e.*, the Hyde.

“In April 1901, this drainage, which discharged into an open ditch, thence to the Welsh Harp Reservoir, adjoining the Edgware Road was diverted, and is being dealt with over four acres of land, thus temporarily abating a most offensive nuisance.

“The means adopted have been quite successful. The drainage of Stag Lane and Roe Green is treated through septic tanks and downward filtration, and the effluent from such, which shows considerable improvement, passes into a ditch by the side of the road.

“A scheme for the more thorough drainage of the whole District has been adopted, at an estimated expenditure of £20,000, but, owing to the limitations on the borrowing powers, a part only of the scheme can be carried out at present. The Council have acquired eight acres of land on the borders of the Parish near Neasden and close to the Metropolitan Railway bridge, for the treatment of sewage by broad irrigation. The character of the soil is mostly clay for three feet in depth, beneath which is one foot of gravel. The areas about to be drained to the sewage works include those most urgently requiring it, namely

the Hyde, Buck's Lane, Kingsbury Green, part of Kingsbury Road, Slough Lane, Church Lane, and Kingsbury Lane.

“This is estimated to cost £10,500, and the sanction of the Local Government Board has been given to the raising of the temporary loan. The Stag Lane and Roe Green area will be dealt with as formerly.

“In making the connections to the new sewer it is urgently hoped that the state of the house drains will receive some attention, as in many instances that have come under observation they have been found to be most defective.

“When the scheme is completed, building operations are sure to go forward more rapidly, especially in a suburb which is unsurpassable for beauty around London. This will yearly help to diminish the extra heavy weight that will have to be paid, for it must be borne in mind that a penny rate now produces but £18.”

Dr. Th. Günther, reports from Hampton Wick, in reference to drainage and sewerage, that—“Plans have been prepared for a surface water scheme for the District which, when carried out, should not only relieve the sewers and obviate further complaints from the Thames Conservancy, but also render the District drier and healthier. Separate surface drains have been laid in houses erected during the year, and the bye-laws are being amended to suit future requirements. The Shone ejector at the Park Gate has not yet been duplicated; this should be done, otherwise serious temporary consequences may ensue.

“There has been less cause for complaint from the Kingston Sewage Works, on the Surrey side of the river. I understand that experiments are there conducted of various bacterial processes, and if the result be satisfactory and a practical system be established at the Kingston Works, the benefit to the inhabitants should be permanent, and also be financially an advantage.”

In reference to the Uxbridge Rural District, Dr. Charpentier writes that—“Your Council has, after many difficulties, completed a good and extensive drainage scheme for Ruislip and Northwood, and for Hillingdon, Yiewsley, West Drayton and Cowley. These works will be of great advantage to your District when the houses are duly connected up with them. In each case the disposal system is by the bacterial treatment. Drainage is required for Hayes; a scheme was under your consideration for some time, but has not yet been carried out. It is to be hoped that this will shortly again be brought forward. In the two small villages of Ickenham and Northolt, there is no drainage but into ditches, cesspits, or the land. In my opinion the last method, if properly carried out, would be the best.”

SEWAGE DISPOSAL.

Upon this subject, Mr. C. A. Patten says of Ealing Borough—“In my last Report I alluded to the fact that, owing to the great increase of population, the demands made on the sewage works of the District were rapidly overtaking the means at the Surveyor’s disposal for coping with them. It is satisfactory, therefore, to be able to

relate that, owing to the wisdom of the Council and the active energy and skill of the Surveyor, the difficulty alluded to is in a fair way to be completely overcome. The Southern Sewage Works have been entirely reorganised; additional bacteria beds have been constructed, and sludge presses have been erected, thus entirely doing away with the old plan of mixing sludge and refuse. The resulting cake from the presses is burnt in the destructors; additional land to the extent of three acres has been acquired for the extension of the bacteria beds as the occasion requires. At the Northern Sewage Works, likewise, considerable changes have been carried out, consisting in the main of the formation of double contact bacteria beds. The total capacity of these is equal to twice the dry weather flow, and at present two of the series are finished and working most satisfactorily. When the whole system is perfected, these Northern Works will be in a high state of efficiency.

“It will be remembered that during the year the Middlesex County Council took very unjustifiable proceedings with regard to the purity of the effluent from these works, and although the decision arrived at by the Magistrates at Brentford in the first instance was condemnatory of this Council, an appeal made later to Quarter Sessions entirely reversed the former conviction. To guard the Council in future, the Surveyor and myself considered it advisable that analyses of the effluent should be made periodically by a highly skilled chemical expert, and the reports made by him up to the present time gave an excellent character of the effluent submitted to him for examination.”

The disposal of sewage in Southall-Norwood is fully described by Dr. J. W. Windle—"I am indebted to our Engineer, Mr. Reginald Brown, A.M.I.C.E., M.S.I., &c., for the following particulars as to the disposal works and farm. The sewage enters the disposal works at two different points. What may be termed the high level outfall sewer takes the sewage from the District proper. This enters the works by passing through a small chamber controlled by valves, and thence into and through a receptacle in which is fixed one of Smith's patent revolving wire screens.

"This screen consists of a water-wheel driven by the momentum of the sewage, which causes an endless band of wire net to revolve slowly, thus catching and lifting out all suspended matters beyond a certain size. A brush revolving in the opposite direction cleans the net as it passes, and the solid matters are cleared to one side and removed by manual labour. The sewage then passes through a well, inside the liming house, and from thence through two valves into one or the other of two small detritus tanks covered with corrugated iron. These tanks have a total capacity of 24,000 gallons.

"At the centre of the length of these tanks scum-boards are fixed, the bottom edges of which are at a distance of 24 inches below the level, the upper edges being above the water level; the outlet end of these tanks have also scum-boards projecting to a distance of 12 inches below the water level, and the top edges of same of course being above the water level. The sewage passes under these boards and over a lip in a continuous stream, into a carrier situate at the upper end of what were originally precipita-

tion tanks. There are four of these tanks, each having a capacity, when empty, of 50,000 gallons, or a total capacity when empty of 200,000 gallons.

“Two of these tanks, viz., Nos. 1 and 2, counting from the liming house, have been converted into contact beds and are filled with coarse clinker, the third tank being still used as a precipitation tank, and the fourth tank being also filled with clinker and used as a contact bed.

“The fourth tank, although originally fed by means of the above-mentioned carrier, is now fed through a separate 6-inch pipe, which brings the sewage from a chamber near the inlet to the works, and carries same into a wooden trough fixed above the clinker bed, and works a Candy's Automatic Sprinkler.

“The effluent water from the first two contact beds discharges at controlled intervals on to a second contact bed at some distance from the first beds.

“This contact bed is of fine material, with earth sides, and a total capacity, when empty, of about 264,000 gallons. The effluent from the third tank passes through two small contact beds, constructed when the works were first laid out, and have a capacity, when empty, of 24,000 gallons. The liquid from the fourth bed (viz., that provided with Candy's sprinkler), is passed through two other small beds fitted with clinker (and also provided with Candy's sprinklers). These latter beds have a capacity, when empty, of 30,000 gallons. The lower outfall takes the sewage from one institution only, viz., Hanwell

Asylum, and discharges into two covered tanks, the combined capacity of which is about 57,000 gallons. The sewage from these tanks is pumped up through a rising main, and discharges into a well at the liming house before mentioned, and then passes through the same process as the District sewage. The precipitated sludge passes into a sludge well near the low level tanks, and is pressed into cake form by means of a filter press.

“The whole of the machinery at the works is driven by gas engines, the gas being supplied from a Dowson’s gas generating plant.

“Considerable difficulty has been experienced during the past year to ensure a good effluent passing into the Canal. The peculiar nature of the sewage arising from a certain factory in the District, having been allowed to discharge a large quantity of waste water into the Council’s sewers, makes the liquid very difficult to deal with by passing it over land.

“The Council, on the advice of their Engineer, purpose making considerable alterations at the works, by increasing, to a large extent, the precipitating tank capacity, and the provision of nearly an acre of bacterial ‘first contact’ beds, the ‘second contact’ being carried out over the land. For these works, and for further extensions, it is also the Council’s intention to purchase an additional two acres of land.”

Mr. C. Dwight Morris (Staines Rural District), complains that—“The greatest nuisance during the year has been the outfall works of the Staines Urban District Council,

situated at West Bedfont, in the Parish of Stanwell. Matters became so acute in April that I was instructed to interview the Local Government Board on the situation, a Report of which I submitted to you on April 26th. The outcome of the interview was distinctly favourable for your authority to take action. Close observation being kept by your officers and neighbouring residents, some 30 witnesses were prepared to give evidence as to the nuisance caused by the said works, but on certain representations being made to you by the Staines Urban District Council, you did not proceed further in the matter, which was very much regretted, having regard to the frequent complaints we have had since then of the offensive odours arising from the works, a matter very seriously affecting the health and comfort of the surrounding inhabitants. I would point out the possibility of certain causes of this irregular nuisance :—

“ 1. Do the brewers of Staines pass their waste effluent into the sewers untreated ?

2. Is the proper amount of material, as lime and aluminoferric, used regularly and systematically in the treatment of the sewage ?

“ 3. Is not crude sewage pumped on the land from time to time, to save expense of using the requisite material for the effective treatment of the same ?

“ The matter ought to be one of simple explanation if properly investigated. It is certain the present state of affairs cannot be allowed to pass, or allowed to rest until a proper solution of the difficulty be found and corrected.”

POLLUTION OF STREAMS.

The Medical Officer of Health of Tottenham, Dr. Butler-Hogan, speaking of the watercourses in the District, says—"I must repeat the dissatisfaction expressed by my predecessor with respect to the condition of the culverted portion of the Moselle Brook, from Scotland Green to White Hart Lane.

"In last year's Report special attention was directed to this, and something ought to be done before the warm weather sets in. The Middlesex County Council having taken over the control of the watercourses of this District, I think it would be advisable that your Council should make some further representation to that authority."

SCAVENGING.

Refuse storage.—The number of new dustbins provided, mostly of the portable type, and the number of movable bins substituted for fixed is considerable.

Refuse removal.—A weekly collection of domestic refuse is becoming general, as shown by Sanitation Table IV, especially in the more populous centres.

Refuse disposal.—The difficulties in disposing of refuse do not decrease. This applies not only to domestic refuse but also to trade refuse.

Dr. Clothier, Medical Officer of Health (Hornsey), describes the system adopted in the case of *fish offal*.—"The duty of disposing of this objectionable refuse rests

with the tradespeople, but as representations were made that great difficulty was experienced by them in getting rid of it, the Council, having regard to the importance, from a health point of view, of promptly disposing of it, decided to make arrangements by which the tradesmen were afforded the opportunity of carting same to the Sanitary Dépôt at Hornsey, where it is placed in a special iron covered tank, and carted away from the District by a manure merchant daily, an empty tank being left each time a call is made to remove the tank containing the offal. The fishmongers are required to make a deposit in advance, and they are now charged at the rate of one shilling per cwt. The fishmongers have largely availed themselves of the conveniences offered them, and from July to December last $25\frac{1}{2}$ tons of this offensive offal was received and disposed of. Before these arrangements were made strong complaints were received of the nuisance caused to the occupiers of premises in the neighbourhood of fishmongers' shops, especially during the hot weather, owing to its irregular removal, and although financially the arrangements may have resulted in a loss to the Council, the great importance of the speedy removal and disposal of such offensive refuse cannot be exaggerated from the point of view of the general health of the District.

“Now that forced draught has been applied to the destructor furnaces arrangements are being made to cremate the offal at the Sanitary Dépôt, which will be a still more satisfactory arrangement.”

The Sanitary Aspects of Road-paving.—The surface of a roadway should be impervious, hard, and smooth. From a sanitary point of view imperviousness is the most important

characteristic ; from the point of view of durability of wear, hardness is the most important ; and for convenience and comfort of rolling traffic and conveyance smoothness is much sought after. Unfortunately, the greater the smoothness for passengers' comfort, the less the foothold for equine safety. Hence the compromise of running passenger conveyances upon rails for smoothness, and horses upon sets of wood, or blocks of stone for roughness and good foothold, as in the case of horse tramcars. One of the great difficulties is the endeavour to reconcile the opposite requirements of passengers and of horses—smoothness and roughness. With the advent of electric tramcars and of motor road cars consideration for the horse will be thrown more and more into the background, and main roads will be of smoother and smoother surface until it will be unnecessary to lay special rails, and only hardness and imperviousness will remain to be considered in laying main roads.

Taking the four kinds of road-paving, namely—asphalte, granite sets, macadam, and wood blocks, the first is the healthiest, because it is impervious, smooth, and homogeneous, and therefore does not absorb, and is easily and thoroughly cleansable ; the last kind is the least healthy, because it is the most absorbent, and the most friable ; the other two occupy intermediate positions.

The more dense and impervious the wood blocks used for road-paving, and the more watertight the jointing, the less unhealthy such a road becomes. The three disadvantages to be corrected are leakage between the blocks and absorbability and friability of the wood

LEGISLATION.

During the year the following Acts of sanitary and administrative importance to the public health were passed:—

The Isolation Hospitals Act, 1901 (1 Ed. VII, Ch. 8);
an Act to amend the Isolation Hospitals Act,
1893.

The Births and Deaths Registration Act, 1901
(1 Ed. VII, Ch. 26); an Act to amend the law
(1836 to 1874) with respect to Districts for
registration purposes and the appointment of
Superintendent Registrars of Births and Deaths
in certain Unions.

The Intoxicating Liquors (Sale to Children) Act, 1901
(1 Ed. VII, Ch. 27); an Act to prevent the sale of
intoxicating liquors to children.

The Factory and Workshops Act, 1901 (1 Ed. VII.,
Ch. 22); an Act to consolidate with amend-
ments the Factory and Workshop Acts.

The Isolation Hospitals Act, 1901.

This Act amends and supplements the Isolation Hospitals Act of 1893, and provides for the transfer by a Local Authority of hospitals for use as isolation hospitals, for the contribution to hospitals provided by a Local Authority, for the power of a hospital committee to contract for hospital accommodation, for the rate of interest,

for amendment as to appeals to the Local Government Board, for the amendment of the definition of Local Authority, for copies of Orders of County Councils to be sent to the Local Government Board, and for representatives of the County Councils on hospital committees. The Act does not apply to the Metropolis.

The Births and Deaths Registration Act, 1901.

This Act amends the sections of the Births and Deaths Registration Acts, 1836 to 1874, relating to the appointment of Superintendent Registrars of temporary Districts.

The Intoxicating Liquors (Sale to Children) Act, 1901.

This Act makes the purchase and sale of liquors in uncorked or unsealed vessels to children under 14 years of age illegal, and provides penalties for the offence.

The Factory and Workshop Act, 1901.

This Act casts heavy additional responsibilities upon the Medical Officer of Health, and requires him to report each year specifically upon the administration of the Act, and to send a copy of his Report to the Secretary of State. In dealing with employers and employed in various directions, the Act will call for the display of a large measure of tactful resource for its smooth administration.

The following are the Sections of most importance to Medical Officers of Health in the Factory and Workshop Act, 1901 :—

PART I.

HEALTH.

1.—(1) The following provisions shall apply to every factory as defined by this Act, except a domestic factory :—

- (a) It must be kept in a cleanly state ;
- (b) It must be kept free from effluvia arising from any drain, water-closet, earth-closet, privy, urinal, or other nuisance ;
- (c) It must not be so overcrowded while work is carried on therein as to be dangerous or injurious to the health of the persons employed therein ;
- (d) It must be ventilated in such a manner as to render harmless, so far as is practicable, all the gases, vapours, dust, or other impurities generated in the course of the manufacturing process or handicraft carried on therein, that may be injurious to health.

(2) The provisions of section ninety-one of the Public Health Act, 1875, with respect to a factory, workshop, or workplace not kept in a cleanly state, or not ventilated, or overcrowded, shall not apply to any factory to which this section applies.

- (3) For the purpose of securing the observance of the requirements in this section as to cleanliness in factories, all the inside walls of the rooms of a factory, and all the ceilings or tops of those rooms (whether those walls, ceilings, or tops are plastered or not), and all the passages and staircases of a factory, if they have not been painted with oil or varnished once at least within seven years, shall (subject to any special exceptions made in pursuance of this section) be limewashed once at least within every fourteen months, to date from the time when they were last limewashed ; and if they have been so painted or varnished shall be washed with hot water and soap once at least within every fourteen months, to date from the time when they were last washed.
- (4) Where it appears to the Secretary of State that in any class of factories, or parts thereof, the provisions of this section with respect to limewashing or washing are not required for the purpose of securing therein the observance of the requirements of this Act as to cleanliness, or are by reason of special circumstances inapplicable, he may, if he thinks fit, by Special Order grant to that class of factories, or parts thereof, a special exception that the said provisions shall not apply thereto.
- (5) A factory in which there is a contravention of this section shall be deemed not to be kept in conformity with this Act.

2.—(1) The provisions of section ninety-one of the Public Health Act, 1875, with respect to a factory, workshop, or workplace, not kept in a cleanly state, or not ventilated, or overcrowded, shall apply to every factory, workshop, and workplace, except any factory to which the last preceding section applies.

(2) Every workshop and every workplace within the meaning of the Public Health Act, 1875, must be kept free from effluvia arising from any drain, water-closet, earth-closet, privy, urinal, or other nuisance, and unless so kept shall be deemed to be a nuisance liable to be dealt with summarily under the law relating to public health.

(3) Where on the certificate of a medical officer of health or inspector of nuisances it appears to any district council that the limewashing, cleansing, or purifying, of any such workshop, or of any part thereof, is necessary for the health of the persons employed therein, the council shall give notice in writing to the owner or occupier of the workshop to limewash, cleanse, or purify the same, or part thereof, as the case may require.

(4) If the person to whom notice is so given fails to comply therewith, within the time therein specified, he shall be liable to a fine not exceeding ten shillings for every day during which he continues to make default, and the council may, if they think fit, cause the workshop or part to be

limewashed, cleansed, or purified, and may recover in a summary manner the expenses incurred by them in so doing from the person in default.

- (5) This section shall not apply to any workshop or workplace to which the Public Health (London) Act, 1891, applies.

3.—(1) A factory shall for the purposes of this Act, and a workshop shall for the purposes of the law relating to public health, be deemed to be so overcrowded as to be dangerous or injurious to the health of the persons employed therein, if the number of cubic feet of space in any room therein bears to the number of persons employed at one time in the room a proportion less than two hundred and fifty, or, during any period of overtime, four hundred cubic feet of space to every person.

- (2) Provided that the Secretary of State may, by Special Order, modify this proportion for any period during which artificial light other than electric light is employed for illuminating purposes, and may, by like order, as regards any particular manufacturing process or handicraft, substitute for the said figures of two hundred and fifty and four hundred respectively any higher figures, and thereupon this section shall have effect as modified by the order.

- (3) Where a workshop or workplace, not being a domestic workshop, is occupied by day as a workshop and by night as a sleeping apartment,

the Secretary of State may, by Special Order, modify the proportion of cubic feet of space prescribed by this section, and substitute therefor any higher figures, and thereupon this section shall have effect as modified by the order.

- (4) There shall be affixed in every factory and workshop a notice specifying the number of persons who may be employed in each room of the factory or workshop by virtue of this section.

4.—(1) If the Secretary of State is satisfied that the provisions of this Act, or of the law relating to public health in so far as it affects factories, workshops, and workplaces, have not been carried out by any district council, he may, by order, authorise an inspector to take, during such period as may be mentioned in the order, such steps as appear necessary or proper for enforcing those provisions.

- (2) An inspector authorised in pursuance of this section shall, for the purpose of his duties thereunder, have the same powers with respect to workshops and workplaces as he has with respect to factories, and he may, for that purpose, take the like proceedings for enforcing the provisions of this Act or of the law relating to public health, or for punishing or remedying any default as might be taken by the district council; and he shall be entitled to recover from the district council all such expenses in and about any proceedings as he may incur, and as are not recovered from any other person.

- 5.—(1) Where it appears to an inspector that any act, neglect, or default in relation to any drain, water-closet, earthcloset, privy, ashpit, water-supply, nuisance, or other matter in a factory or workshop, is punishable or remediable under the law relating to public health, but not under this Act, that inspector shall give notice in writing of the act, neglect, or default, to the district council in whose district the factory or workshop is situate, and it shall be the duty of the district council to make such inquiry into the subject of the notice, and take such action thereon, as seems to that council proper for the purpose of enforcing the law, and to inform the inspector of the proceedings taken in consequence of the notice.
- (2) An inspector may, for the purposes of this section, take with him into a factory or workshop a medical officer of health, inspector of nuisances, or other officer of the district council.
- (3) Where notice of an act, neglect, or default, is given by an inspector under this section to a district council, and proceedings are not taken within one month for punishing or remedying the act, neglect, or default, the inspector may take the like proceedings for punishing or remedying the same as the district council might have taken, and shall be entitled to recover from the district council all such expenses in and about the proceedings as the inspector incurs and as are not recovered from any other person, and have not been incurred in any unsuccessful proceedings.

- 6.—(1) In every factory and workshop adequate measures must be taken for securing and maintaining a reasonable temperature in each room in which any person is employed, but the measures so taken must not interfere with the purity of the air of any room in which any person is employed.
- (2) The Secretary of State may, by Special Order, direct, with respect to any class of factories or workshops, that thermometers be provided, maintained, and kept in working order, in such place and position as may be specified in the Order.
- (3) A factory or workshop in which there is any contravention of this section, or of any order under this section, shall be deemed not to be kept in conformity with this Act.
- 7.—(1) In every room in any factory or workshop sufficient means of ventilation shall be provided, and sufficient ventilation shall be maintained.
- (2) The Secretary of State may, by Special Order, prescribe a standard of sufficient ventilation for any class of factories or workshops, and that standard shall be observed in all factories and workshops of that class, and an order made under this power may supersede any provision of this Act or order of the Secretary of State with respect to ventilation in cotton cloth factories.

(3) A factory in which there is a contravention of the provisions of this section shall be deemed not to be kept in conformity with this Act, and a workshop in which there is a contravention of the provisions of this section shall be deemed to be a nuisance liable to be dealt with summarily under the law relating to public health.

(4) If the occupier of a factory or workshop (including a cotton cloth factory in which humidity of the atmosphere is artificially produced) alleges that the whole or part of the expenses of providing the means of ventilation required by this Act ought to be borne by the owner, he may by complaint apply to a court of summary jurisdiction, and that court may make such order concerning the expenses or their apportionment as appears to the court to be just and equitable under the circumstances of the case, regard being had to the terms of any contract between the parties.

8.—(1) In every factory or workshop or part thereof in which any process is carried on which renders the floor to be wet to such an extent that the wet is capable of being removed by drainage, adequate means shall be provided for draining off the wet.

(2) A factory in which there is a contravention of the provisions of this section shall be deemed not to be kept in conformity with this Act, and a workshop in which there is a contravention of the provisions of this section shall be deemed to be a nuisance liable to be dealt with summarily under the law relating to public health.

- 9.—(1) Every factory and workshop must be provided with sufficient and suitable accommodation in the way of sanitary conveniences, regard being had to the number of persons employed in or in attendance at the factory or workshop, and also where persons of both sexes are or are intended to be employed or in attendance, with proper separate accommodation for persons of each sex.
- (2) The Secretary of State shall, by Special Order determine what is sufficient and suitable accommodation within the meaning of this section.
- (3) A factory or workshop in which there is a contravention of this section shall be deemed not to be kept in conformity with this Act.
- (4) This section does not apply to the administrative county of London, or to any place where section twenty-two of the Public Health Acts Amendment Act, 1890, is in force.

PART IV.

DANGEROUS AND UNHEALTHY INDUSTRIES.

(i.) *Special Provisions.*

- 73.—(1) Every medical practitioner attending on or called in to visit a patient whom he believes to be suffering from lead, phosphorus, arsenical or mercurial poisoning, or anthrax, contracted in any factory or workshop, shall (unless the notice required by this sub-section has been previously sent) send to the Chief Inspector of Factories at the Home

Office, London, a notice stating the name and full postal address of the patient and the disease from which, in the opinion of the medical practitioner, the patient is suffering, and shall be entitled in respect of every notice sent in pursuance of this section to a fee of two shillings and sixpence, to be paid as part of the expenses incurred by the Secretary of State in the execution of this Act.

- (2) If any medical practitioner, when required by this section to send a notice, fails forthwith to send the same, he shall be liable to a fine not exceeding forty shillings.
- (3) Written notice of every case of lead, phosphorus, or arsenical or mercurial poisoning, or anthrax, occurring in a factory or workshop, shall forthwith be sent to the inspector and to the certifying surgeon for the district; and the provisions of this Act with respect to accidents shall apply to any such case in like manner as to any such accident as is mentioned in those provisions.
- (4) The Secretary of State may, by Special Order, apply the provisions of this section to any other disease occurring in a factory or workshop, and thereupon this section and the provisions referred to therein shall apply accordingly.

74.—If in a factory or workshop where grinding, glazing, or polishing on a wheel, or any process is carried on by which dust, or any gas, vapour, or other impurity, is generated and inhaled by the

workers to an injurious extent, it appears to an inspector that such inhalation could be to a great extent prevented by the use of a fan or other mechanical means, the inspector may direct that a fan or other mechanical means of a proper construction for preventing such inhalation be provided within a reasonable time; and if the same is not provided, maintained, and used, the factory or workshop shall be deemed not to be kept in conformity with this Act.

PART V.

SPECIAL MODIFICATIONS AND EXTENSIONS.

(iii.) *Bakehouses.*

97.—(1) It shall not be lawful to let or suffer to be occupied or to occupy any room or place as a bakehouse, unless the following regulations are complied with:—

- (a) A water-closet, earth-closet, privy, or ashpit must not be within or communicate directly with the bakehouse;
- (b) Every cistern for supplying water to the bakehouse must be separate and distinct from any cistern for supplying water to a water-closet;
- (c) A drain or pipe for carrying off faecal or sewage matter must not have an opening within the bakehouse.

- (2) If any person lets or suffers to be occupied or occupies any room or place as a bakehouse in contravention of this section he shall be liable to a fine not exceeding forty shillings, and to a further fine not exceeding five shillings for every day during which any room or place is so occupied after a conviction under this section.

98.—(1) Where a court of summary jurisdiction is satisfied on the prosecution of an inspector or a district council that any room or place used as a bakehouse is in such a state as to be on sanitary grounds unfit for use or occupation as a bakehouse, the occupier of the bakehouse shall be liable to a fine not exceeding, for the first offence, forty shillings, and for any subsequent offence five pounds.

- (2) The court of summary jurisdiction, in addition to or instead of inflicting a fine, may order means to be adopted by the occupier, within the time named in the order, for the purpose of removing the ground of complaint. The court may, on application, enlarge the time so named, but if after the expiration of the time as originally named or enlarged by subsequent order the order is not complied with, the occupier shall be liable to a fine not exceeding one pound for every day that the non-compliance continues.

99.—(1) All the inside walls of the rooms of a bakehouse, and all the ceiling or tops of those rooms (whether those walls, ceilings, or tops are

plastered or not), and all the passages and staircases of a bakehouse, must either be painted with oil or varnished or be limewashed, or be partly painted or varnished and partly limewashed; and

- (a) Where the bakehouse is painted with oil or varnished, there must be three coats of paint or varnish, and the paint or varnish must be renewed once at least in every seven years, and must be washed with hot water and soap once at least in every six months; and
 - (b) Where the bakehouse is limewashed, the limewashing must be renewed once at least in every six months.
- (2) A bakehouse in which there is a contravention of this section shall be deemed not to be kept in conformity with this Act.

100.—(1) A place on the same level with a bakehouse, and forming part of the same building, may not be used as a sleeping place, unless it is constructed as follows; that is to say —

- (a) Is effectually separated from the bakehouse by a partition extending from the floor to the ceiling; and
- (b) Has an external glazed window of at least nine superficial feet in area, of which at the least four and a half superficial feet are made to open for ventilation.

- (2) If any person lets or occupies or continues to let or knowingly suffers to be occupied any place contrary to this section he shall be liable to a fine not exceeding, for the first offence, twenty shillings, and for any subsequent offence five pounds.

101.--(1) An underground bakehouse shall not be used as a bakehouse unless it was so used at the passing of this Act.

- (2) Subject to the foregoing provision, after the first day of January one thousand nine hundred and four an underground bakehouse shall not be used unless certified by the district council to be suitable for that purpose.

- (3) For the purpose of this section an underground bakehouse shall mean a bakehouse, any baking room of which is so situate that the surface of the floor is more than three feet below the surface of the footway of the adjoining street, or of the ground adjoining or nearest to the room. The expression "baking-room" means any room used for baking, or for any process incidental thereto.

- (4) An underground bakehouse shall not be certified as suitable unless the district council is satisfied that it is suitable as regards construction, light, ventilation, and in all other respects.

- (5) This section shall have effect as if it were included among the provisions relating to bakehouses which are referred to in section twenty-six of the Public Health (London) Act, 1891.

- (6) If any place is used in contravention of this section, it shall be deemed to be a workshop not kept in conformity with this Act.
- (7) In the event of the refusal of a certificate by the district council, the occupier of the bakehouse may, within twenty-one days from the refusal, by complaint apply to a court of summary jurisdiction, and if it appears to the satisfaction of the court that the bakehouse is suitable for use as regards construction, light, ventilation, and in all other respects, the court shall thereupon grant a certificate of suitability of the bakehouse, which shall have effect as if granted by the district council.
- (8) Where any place has been let as a bakehouse, and the certificate required by this section cannot be obtained unless structural alterations are made, and the occupier alleges that the whole or part of the expenses of the alterations ought to be borne by the owner, he may by complaint apply to a court of summary jurisdiction, and that court may make such order concerning the expenses or their apportionment as appears to the court to be just and equitable, under the circumstances of the case, regard being had to the terms of any contract between the parties, or in the alternative the court may, at the request of the occupier, determine the lease.

102.—As respects every retail bakehouse the provisions of this part of this Act shall be enforced by the district council of the district in which the

retail bakehouse is situate, and not by an inspector; and for the purposes of this section the medical officer of health of the district council shall have and may exercise all the powers of entry, inspection, taking legal proceedings and otherwise of an inspector.

In this section the expression “retail bakehouse” means any bakehouse or place, not being a factory, the bread, biscuits, or confectionery baked in which are sold, not wholesale, but by retail, in some shop or place occupied with the bakehouse.

PART VI.

HOME WORK.

107.—In the case of persons employed in such classes of work as may from time to time be specified by Special Order of the Secretary of State—

(1) The occupier of every factory and workshop and every contractor employed by any such occupier in the business of the factory or workshop shall—

(a) Keep in the prescribed form and manner, and with the prescribed particulars, lists showing the names and addresses of all persons directly employed by him, either as workmen or as contractors, in the business of the factory or workshop, outside the factory or workshop, and the places where they are employed; and

- (b) Send to an inspector such copies of or extracts from those lists as the inspector may from time to time require; and
 - (c) Send on or before the first day of February and the first day of August in each year copies of those lists to the district council of the district in which the factory or workshop is situate.
- (2) Every district council shall cause the lists received in pursuance of this section to be examined, and shall furnish the name and place of employment of every outworker included in any such list whose place of employment is outside its district to the council of the district in which his place of employment is.
- (3) The lists kept by the occupier or contractor shall be open to inspection by any inspector under this Act, and by any officer duly authorised by the district council, and the copies sent to the council and the particulars furnished by one council to another shall be open to inspection by any inspector under this Act.
- (4) This section shall apply to any place from which any work is given out, and to the occupier of that place, and to every contractor employed by any such occupier in connection with the said work, as if that place were a workshop.

- (5) In the event of a contravention of this section by the occupier of a factory, workshop, or place by a contractor, the occupier or contractor shall be liable to a fine not exceeding forty shillings, and in the case of a second or subsequent offence not exceeding five pounds.

108.—(1) If the District Council within whose District is situate a place in which work is carried on for the purpose of or in connection with the business of a factory or workshop give notice in writing to the occupier of the factory or workshop, or to any contractor employed by any such occupier, that that place is injurious or dangerous to the health of the persons employed therein, then, if the occupier or contractor after the expiration of one month from the receipt of the notice gives out work to be done in that place, and the place is found by the court having cognizance of the case to be so injurious or dangerous, he shall be liable to a fine not exceeding ten pounds.

(2) This section shall apply in the case of the occupier of any place from which any work is given out as if that place were a workshop.

(3) This section shall not apply except in the case of persons employed in such classes of work as the Secretary of State may specify by Special Order.

109.—If the occupier of a factory or workshop or of any place from which any work is given out, or any contractor employed by any such employer, causes or allows wearing apparel to be made, cleaned, or repaired, in any dwelling-house or

building occupied therewith, whilst any inmate of the dwelling-house is suffering from scarlet fever or smallpox, then unless he proves that he was not aware of the existence of the illness in the dwelling-house, and could not reasonably have been expected to become aware of it, he shall be liable to a fine not exceeding ten pounds.

- 110.**—(1) If any inmate of a house is suffering from an infectious disease to which this section applies, the District Council of the District in which the house is situate may make an order forbidding any work to which this section applies to be given out to any person living or working in that house, or such part thereof as may be specified in the order, and any order so made may be served on the occupier of any factory or workshop, or any other place from which work is given out, or on the contractor employed by any such occupier.
- (2) The order may be made notwithstanding that the person suffering from an infectious disease may have been removed from the house, and the order shall be made either for a specified time or subject to the condition that the house or part thereof liable to be infected shall be disinfected to the satisfaction of the Medical Officer of Health, or that other reasonable precautions shall be adopted.
- (3) In any case of urgency the powers conferred on the District Council by this section may be exercised by any two or more Members of the Council acting on the advice of the Medical Officer of Health.

- (4) If any occupier or contractor on whom an order under this section has been served contravenes the provisions of the order, he shall be liable to a fine not exceeding ten pounds.
- (5) The infectious diseases to which this section applies are the infectious diseases required to be notified under the law for the time being in force in relation to the notification of infectious diseases, and the work to which this section applies is the making, cleaning, washing, altering, ornamenting, finishing and repairing of wearing apparel and any work incidental thereto, and such other classes of work as may be specified by Special Order of the Secretary of State.

PART VIII.

ADMINISTRATION.

(iii.) *Local Authorities.*

125.—For the purpose of their duties with respect to workshops and workplaces under this Act, and under the law relating to public health, the District Council and their officers shall, without prejudice to their other powers, have all such powers of entry, inspection, taking legal proceedings or otherwise, as an inspector under this Act.

(v.) *Notices, Registers, and Returns.*

131.—Every District Council shall keep a register of all workshops situate within their district.

132.—The Medical Officer of Health of every District Council shall, in his annual report to them, report specifically on the administration of this Act in workshops and workplaces, and he shall send a copy of his annual report, or so much of it as deals with this subject, to the Secretary of State.

MISCELLANEOUS PROVISIONS.

133.—Where any woman, young person, or child is employed in a workshop in which no abstract of this Act is affixed as by this Act required, and the Medical Officer of the District Council becomes aware thereof, he shall forthwith give written notice thereof to the Inspector for the District.

FACTORY AND WORKSHOP.

HOME WORK.

The Home Work Order of 11th December, 1901.

In pursuance of the powers conferred on me by Sections 107, 108, and 110 of the Factory and Workshop Act, 1901, I hereby make the following Order :—

I. Section 107 (relating to lists of outworkers) and Section 108 (relating to employment in unwholesome premises) shall apply to the following classes of work :—

The making, cleaning, washing, altering, ornamenting, finishing, and repairing of wearing apparel and any work incidental thereto ;

The making, ornamenting, mending, and finishing of lace and of lace curtains and nets ;

Cabinet and furniture making and upholstery work ;
 The making of electro-plate ;
 The making of files ; and
 Fur-pulling.

II. Section 110 (relating to the prohibition of home work in places where there is infectious disease) shall apply to the following classes of work :—

The making, cleaning, washing, altering, ornamenting, finishing, and repairing of wearing apparel and any work incidental thereto (as in the said section specified);

The making, ornamenting, mending, and finishing of lace and of lace curtains and nets ;

Upholstery work ; and

Fur-pulling.

III. The lists of outworkers required to be kept by Section 107 and the copies thereof shall be kept and made in the form and manner and with the particulars shown in the Schedule hereto.

The Order of 23rd March, 1898, relating to lists of outworkers, is hereby revoked.

This Order may be referred to as the Home Work Order of 11th December, 1901, and shall come into force on 1st January, 1902.

CHAS. T. RITCHIE,

One of His Majesty's

Principal Secretaries of State.

Home Office, Whitehall,

11th December, 1901.

ADOPTIVE ACTS, BYE-LAWS, AND REGULATIONS.

In the Special Table, at the end of the Report, these are shown, where they are in force, so far as the information is available.

The Medical Officer of Health of the Greenford Urban District (Mr. George Hope) says:—“I am pleased to report that the Council has at last succeeded in getting their bye-laws, which will prove most useful; also to know that you have adopted the Infectious Diseases Prevention Act, 1890. I would like to see the Public Health Act Amendment Act, and Part III of the Housing of the Working Classes Act also, adopted, then your powers would be still more complete.”

The Medical Officer of Health of Hornsey (Dr. Clothier) reports as to New Streets and Buildings:—“The new bye-laws, which came into force on the 14th of June last, are of far-reaching importance for the future health of the District.

“New streets, which, hitherto, only required to be 40 feet in width, now have to be 45 feet wide at the least when over 450 feet in length; and the amount of air space necessary at the rear of domestic buildings is also considerably increased.

“Among other advantages obtained by the new bye-laws may be mentioned—Special provisions as to the composition of the concrete covering the site of the buildings, and the quality of the mortar to be used. Vertical damp-courses are required where ground abuts

against the walls of new buildings. Rooms over stables are required to have concrete floors, and the staircases to same to be kept separate from the stable. The areas of windows for light and ventilation of bath-rooms, lavatories, sculleries, &c., are now clearly defined. Ventilation has to be provided to the staircases of buildings constructed for more than two families. All drains (both sewer and surface water), when passing under new buildings, have to be surrounded with 6 inches of concrete, and proper inspection manholes are required to be constructed on the drains for access. The soil-pipes have to be of lead or cast iron of specified weights. Traps of w.c.'s have to be ventilated. Bath and sink waste-pipes have to be taken through the external wall of the building at the nearest practicable point, and proper impervious paving has to be laid at the rear of all new buildings.

“These bye-laws appear to be specially important, and cannot fail to have good results.”

PART II.

SUMMARIES OF THE REPORTS OF THE MEDICAL OFFICERS OF HEALTH OF THE DISTRICTS OF THE COUNTY, URBAN AND RURAL, IN ALPHABETICAL ORDER.

The Rural Districts follow after the Urban.

The birth-rates and death-rates are per thousand of population living, the infantile mortality-rates are per thousand births.

Details of the vital statistics and sanitary work, extracted from the District Reports, will be found collated in the Tables at the end of this Report.

In the Summaries a more or less methodical arrangement is adopted, so far as the forms in which the various Reports are cast will allow. The facts are grouped as follows:—Name of District, Census 1901—area in acres, Inhabited Houses, Total Number of Tenements, Population 1891 and 1901, Medical Officer of Health, Estimated Population, Births and Birth-rate, Deaths and Death-rate, Deaths under one year and Infantile Mortality-rate, Statistical Notes (including Zymotic Death-rate), Infectious Diseases Notification, Bacteriological Examinations, Epidemics, Isolation Hospital, Ambulance, Disinfection, Vaccination, Water Supply, Drainage and Sewerage, Sewage Disposal, Pollution of Streams, Refuse Removal, Refuse Disposal, other notes of sanitary works, and Adoptive Acts, Bye-laws, and Regulations in force.

ACTON URBAN DISTRICT.

Census 1901.

Area in acres	2,305
Inhabited houses	6,086
Total tenements	8,326
Population, 1891	24,206
„ 1901	37,744

Medical Officer of Health, G. A. Garry-Simpson, M.R.C.S.

Estimated population, 37,744.

Births, 1,211; birth-rate, 32·0.

Deaths, 519; death-rate, 13·7.

Deaths under 1 year, 206; infantile mortality-rate, 170·1.

Notes on Statistics.—The number of deaths from the principal zymotic diseases was 94, equivalent to a zymotic death-rate of 2·4, as compared with 2·2 in 1900, and 2·5 in 1899.

Infectious Diseases Notification.—The Act has been in force in the District since 1890. During the year 172 cases were notified, and in addition 25 cases of chicken-pox. In 1900 the number of cases notified was 333, and in 1899 the number was 239.

Epidemics.—There was only one case of smallpox. Diarrhœa and whooping-cough were somewhat prevalent, and scarlet fever was less prevalent than during the previous five years.

Isolation Hospital.—The Friar's Estate is reported to have been purchased, and the site to be a good one.

Water Supply.—The District is supplied by the Grand Junction Waterworks Company.

Drainage and Sewerage.—Nearly three thousand yards of new sewers have been laid, and some seventy yards re-laid.

Sewage Disposal.—The bacterial treatment of a portion of the sewage by means of an open septic tank, followed by continuous filtration, having proved successful, the Council undertook to treat the whole of the sewage in this manner. During the year the new filters have been prepared, and will soon be at work. It is hoped that the new installation will be at work at the beginning of the next financial year.

Sanitation Generally.—Attention is again drawn to the need of a destructor furnace for dealing with refuse. There is great need for sanitary conveniences in the centre of the town. Some 450 houses were erected during year.

BRENTFORD URBAN DISTRICT.

Census 1901.

Area in acres ..	..	..	1,091
Inhabited houses ..	..	..	2,914
Total tenements ..	..	..	3,122
Population, 1891 ..	..	..	13,738
„ 1901 ..	..	..	15,171

Medical Officer of Health, Henry Bott, L.R.C.P., M.R.C.S.

Estimated population, 15,186.

Births, 516; birth-rate, 33·9.

Deaths, 262; death-rate, 17·2.

Deaths under 1 year, 100; infantile mortality-rate, 193·8.

Notes on Statistics.—The deaths from the principal zymotic diseases numbered 57, equivalent to a death-rate of 3·7, or 1 per thousand higher than in the previous year, and 0·5 higher than the average of the previous 10 years.

Infectious Diseases Notification.—The Act has been in force since December, 1889. During the year 90 certificates were received, as compared with 128, 91, and 81, in the three previous years; 30 cases of scarlet fever were

notified, as compared with 76 and 34 in the two previous years. A suspected case proved not to be bubonic plague.

Epidemics.—The only zymotic disease that showed a high mortality during the year was diarrhoea amongst children.

Isolation Hospital.—During the year 29 cases of scarlet fever, 8 of diphtheria, and 5 of enteric fever were admitted. Also, 1 case of smallpox, on the admission of which the cases of other diseases were removed elsewhere.

Vaccination.—Upon the occurrence of smallpox the arms of the children in the schools were examined as to vaccination. Of 3,015 scholars, the arms of 2,689 were so examined, with the result that 473, or 17·59 per cent., were found with no mark, 20·45 per cent. with one mark, 18·29 with two marks, 20·75 with three, 22·49 with four, and 0·40 with five marks.

Sanitary Work.—Regular visits were made to premises requiring periodical inspection. A few dwellings have been erected by the District Council in Starnage Road West.

CHISWICK URBAN DISTRICT.

Census 1901.

Area in acres ..	..	..	1,249
Inhabited houses	..	..	5,073
Total tenements	..	..	6,430
Population, 1891	..	..	21,963
„ 1901	..	..	28,809

Medical Officer of Health, F. C. Dodsworth, L.R.C.P.

Estimated population, 30,005.

Births, 844; birth-rate, 28·12.

Deaths, 343; death-rate, 11·43, exclusive of 9 non-residents.

Deaths under 1 year; 103; Infantile mortality-rate, 122.

Statistics.—9 deaths occurred in St. Joseph's Hospital for Incurables, all non-residents, and are not included in the death-rate. The number of deaths from the principal zymotic diseases was 59, including 22 from enteritis as well as 22 from diarrhœa, equivalent to a rate of 1·6. In the previous year the deaths from the zymotic diseases numbered 33, and in the year before 67.

Infectious Diseases Notification.—The Act has been in force since 1st January, 1890. During the year 177 notifications were received, in the previous year 235. Chicken-pox was notifiable during two months, and 26 cases were notified.

Epidemics.—Two cases of small-pox occurred. Diarrhœa was prevalent amongst infants. The type of scarlet fever was very mild, only 1 death occurring amongst 82 cases notified. The same applied to enteric fever, 17 cases notified and no death. A suspicious case occurred that ultimately proved not to be bubonic plague.

Isolation Hospital.—The plans of a future hospital have been submitted to the Local Government Board. It is hoped it will be erected before another year is passed.

Sanitation.—The cowsheds, dairies, and milk shops, and the slaughter-houses and bakehouses have been regularly

inspected. The Homefield Recreation Ground has been opened to the public. Public paths are reported to be much needed, and also a centrally situated public convenience. Plans were submitted for 131 houses, 18 shops, and 23 blocks of flats. "The erection of a dust destructor remains in prospective."

EALING BOROUGH.

Census 1901.

Area in acres	2,947
Inhabited houses	5,991
Total tenements	6,726
Population, 1891	23,979
„ 1901	33,031

Medical Officer of Health, C. A. Patten, L.R.C.P., M.R.C.S.

Estimated population, 33,274.

Births, 708; birth-rate, 21·2.

Deaths, 370; death-rate, 11·1.

Deaths under one year, 81; infantile mortality-rate, 114·4.

Statistics.—The deaths from the principal zymotic diseases numbered 28, equal to a death-rate of 1·2 per 1,000. In the two previous years the deaths from the same causes were 32 and 42 respectively.

Infectious Diseases Notification.—The Act has been in force since January, 1890. The number of cases notified during the year was 181, as compared with 181, 261, and 137 in the three previous years.

Epidemics.—A severe outbreak of measles occurred, causing 14 deaths, and necessitating the closure of several

schools, principally in West Ealing. Otherwise the Borough was practically free from epidemic. The scarlet fever cases, that had been 176 and 103 in the two previous years, further fell to 90. One case of smallpox occurred, and this was promptly dealt with. The Borough is said to be well vaccinated. A case of suspected plague proved, after investigation, not to be as suspected.

Disinfection.—A new steam disinfector has been recently erected, and is working efficiently.

Sanitation.—Plans were passed for 501 houses, 68 flats, and 55 shops, and there were 382 approved for occupation. In the provision of workmen's dwellings, 19 houses were actually occupied; the total number being erected is 122, 18 of these being flats, and a total accommodation for 140 families. The refuse is collected weekly. The sewers are periodically flushed, in places automatically, and are ventilated by the erection of tall shafts. The Grand Junction Waterworks Company supplies the Borough, and draw-taps upon the house mains are encouraged. The wood paving of the tram-roads is reported as an improvement. The sewage works, northern and southern, are being extended and improved.

EDMONTON URBAN DISTRICT.

Census 1901.

Area in acres ..	..	..	3,894
Inhabited houses	..	..	7,795
Total tenements	..	..	9,017
Population, 1891	..	..	25,381
„ 1901	..	..	46,899

Medical Officer of Health, C. H. Adamson, M.B., F.R.C.S.

Estimated population, 44,911.

Births, 1,640 ; birth-rate, 36·5 (exclusive of 3 in Edmonton Union).

Deaths, 674 ; death-rate, 15·0 (excluding 52 in Strand Union Workhouse and Schools, and including 50 in Edmonton Workhouse and 70 dying without the District).

Deaths under 1 year, 271 ; infantile mortality-rate, 165·2.

Statistics.—The Strand Workhouse and Schools (inmates of workhouse, 865, of schools, 313; births in workhouse, 3, and deaths in workhouse, ? , and in schools, ?), have been excluded from the statistics. Of the Edmonton Union Workhouse (inmates, 714, births, ? , deaths, 181), 50 deaths properly belonging to the District have been included, 70 deaths of Edmonton residents dying without the District have also been included.

The number of deaths from the principal zymotic diseases, inclusive of persons belonging to the District, whose deaths occurred without, was 111, equal to a rate of 2·4 per 1,000, in the three previous years the rates were 2·6, 4·6, and 5·0.

Infectious Diseases Notification.—The Act has been in force since 1890. During the year 334 cases of dangerous infectious diseases were notified, of which 13 were smallpox, 156 scarlatina, 40 diphtheria, and 65 enteric fever.

Epidemics.—13 cases of smallpox were notified during the last four months of the year. Enteric fever caused 65 cases, as compared with 67, 43 and 23, in the three previous years; in the same years the deaths from the same cause were 5 and 6, 8 and 2.

Isolation Hospital.—There is an arrangement with the Enfield Urban District Council reserving in their hospital at World's End 9 beds for scarlet fever, 1 for enteric fever, and 4 for diphtheria. Also with the hospital at South Mimms, reserving 4 beds for smallpox. A site has been purchased in the District for the purpose of an isolation hospital. The site is towards the northern boundary, on the main road from London to Cambridge. Fifteen acres are to be reserved for the hospital, and the Hertford Road frontage is to be sold.

Sanitation.—The District is supplied with water by the New River Company. A few houses are supplied from wells, samples from which are taken from time to time and subjected to analysis. New sewers are constructed as building extends, and old sewers are reconstructed to greater depth as found advisable. The sewage is disposed of at the sewage farm in the north-eastern part of the District. It has been found cheaper and more efficient to remove the house refuse by contract than to remove house and trade refuse by the Council's own men and carts; 583 houses were erected and approved of for occupation during the year. The houses are built to suit the requirements of the working classes. The provision of public sanitary conveniences is suggested in place of the present out-of-date arrangements. The Council declined to licence certain premises for a proposed new slaughter-house, and refused an application to establish a gut-scraping business in the District. During the year 327 carcasses of animals, old beds, garbage, &c., were removed from ditches and wastes; 352 gipsies were seen, 261 removed, 7 summoned, and 2 warrants were issued.

ENFIELD URBAN DISTRICT.

Census 1901.

Area in acres	12,601
Inhabited houses	7,982
Total tenements	8,618
Population, 1891	31,536
,, 1901	42,738

Medical Officer of Health, J. J. Ridge, M.D., B.S., B.A., B.Sc., &c.

Estimated population, 43,000.

Births, 1,232 ; birth-rate, 28·65.

Deaths, 524 ; death-rate, 12·18.

Deaths under 1 year, 110 ; infantile mortality-rate, 89·3.

Statistics. — The deaths from the principal zymotic diseases numbered 87, equal to a rate of 2·02 per 1,000 ; the numbers in the three preceding years were 143, 190, and 145.

Infectious Diseases Notification.—The Act has been in force since January, 1890. During the past year 368 cases of dangerous infectious diseases were notified, as compared with 387, 494, and 287 in the three previous years.

Bacteriological Examinations.—18 swabs, or specimens from doubtful diphtheritic throats, were examined for medical men.

Epidemics.—Scarlatina was somewhat more prevalent, and diphtheria somewhat less, than in the previous year, and enteric fever was less prevalent. Three cases of smallpox occurred. Measles was prevalent in July,

necessitating the closure of several schools, but whooping-cough and diarrhoea were less prevalent.

Isolation Hospital.—The hospital is working most satisfactorily. There are 89 beds—56 for scarlatina, 18 for enteric, and 13 for diphtheria cases, and 2 in an observation block for doubtful cases. 459 cases were admitted, with 16 deaths. Of the 459, some 209 were cases admitted from neighbouring Districts, and 250 from Enfield proper. The cases admitted from other Districts were as follows: From Edmonton 118, from Waltham Abbey 26, from Friern Barnet 25, from Southgate 17, from Wood Green 15, and from Cheshunt 5.

Sanitation.—About 8 miles of new sewers and 2 miles of combined drains have been laid during the year. “Large septic tanks have been constructed at the sewage farm for the low level sewage.” 17 roads have been made, and 426 houses certified as fit for occupation. $2\frac{1}{4}$ miles of new water mains have been laid, and 486 additional houses supplied. The yield of the wells at Ponder’s End has diminished through the pumping from some deep wells in the District. Additional adits have been driven in the chalk, and arrangements made to sink another well in another part of the District. 10 samples of water from private sources were examined, and not found polluted. It is reported that it will be necessary to appoint more Sanitary Inspectors to cope with the additional work. It is suggested that health visitors or instructors to the poor would improve the habits and mode of living in poor-class dwellings. A new park in the Town District has been acquired, and steps are being taken to acquire other spaces elsewhere.

FINCHLEY URBAN DISTRICT.

Census 1901.

Area in acres	3,384
Inhabited houses	3,947
Total tenements	4,604
Population, 1891	16,647
„ 1901	22,126

Medical Officer of Health, H. Kenwood, M.B., D.P.H.,
F.C.S.

Estimated population, 23,805.

Births, 540; birth-rate, 22·7.

Deaths, 219; death-rate, 9·2.

Deaths under 1 year, 53; infantile morality-rate, 98·1.

Statistics.—In the Woodside Home for Incurable Women (inmates 52), 6 deaths occurred; and in the Convent of the Good Shepherd (inmates?), also 6 deaths; and these 12 deaths have been excluded from the total. The deaths from the principle zymotic diseases numbered 25, equal to a rate of 1·05; in the previous year the rate was 1·04.

Infectious Diseases Notification.—The Act has been in force since the 1st January, 1890. During the year 151 cases of dangerous infectious diseases were notified, as compared with 132 and 126 in the two preceding years.

Bacteriological Examinations.—In 11 suspected cases of diphtheria bacteriological examinations were made, with 8 negative results. In 3 cases of suspected enteric fever, 2 of the examinations gave positive results. During the previous year the bacteriological examinations made numbered 7.

Epidemics.—In the last two months of the year 7 cases of smallpox occurred. A severe general outbreak of measles caused 12 deaths, and enteric fever and diphtheria were somewhat more prevalent than in the previous year. Whooping-cough and influenza were also prevalent.

Isolation Hospital.—The old hospital is no longer suitable for the District, and the erection of a new hospital is under consideration, but postponed by temporary arrangement with the Hornsey District, by which Finchley sends fever cases to the Hornsey Hospital, and Hornsey sends smallpox cases to the Finchley Hospital, the latter hospital being temporarily devoted, with additions, solely to the admission of smallpox.

Sanitation.—Many samples of effluents from the sewage farm were chemically examined, and, with two exceptions, the results were satisfactory. The monthly chemical examinations of the water supplied by the Company have been very satisfactory, excepting on one occasion, when the street mains were disturbed. All the premises requiring periodical inspection have been duly visited at intervals, and generally found in satisfactory condition. At the sewage disposal works, three old filter beds have been remade, and 60 acres of land, towards Colney Hatch Lane, have been added to the works. Gravitation for the low level sewage will avoid the heavy expenditure of pumping, and it will be possible to treat the whole biologically at a cheaper annual cost. The scheme is capable of dealing with 600,000 gallons, and the area of land to be left open for the several purposes is, storm water 8 acres, treated sewage 7 acres, sludge 2 acres, total 17 acres. A carrier will ultimately

collect the effluent parallel to Coppett's Road, and convey it to an outlet to the brook near the junction of Coppett's Lane with Colney Hatch Lane.

FRIERN BARNET URBAN DISTRICT.

Census 1901.

Area in acres	1,304
Inhabited houses	1,559
Total tenements	1,856
Population, 1891	9,173
„ 1901	11,566

Medical Officer of Health, F. A. Spreat, M.R.C.S., D.P.H.

Estimated population, 8,816 (exclusive of 2,750 in Colney Hatch Asylum, occupying 149·1 acres).

Births, 242; birth-rate, 27·4.

Deaths, 105; death-rate, 11·9 (including 6 residents dying without the district, and excluding 199 dying in Colney Hatch Asylum).

Deaths under 1 year, 21; infantile mortality-rate, 86·7.

Statistics.—The London County Asylum at Colney Hatch (population 2,750, births 0, deaths 199) is excluded from the above rates, and the deaths of 6 residents dying beyond the district are included. The deaths from the principal zymotic diseases (excluding 4 from enteric fever in the Colney Hatch Asylum) numbered 16, equal to a rate of 1·8 per 1,000, as compared with 0·5, 2·5, and 1·9 in the three previous years.

Infectious Diseases Notification.—The Act has been in force since January, 1891. During the year 119 cases of dangerous infectious diseases were notified, exclusive of 292 of measles (1 of which occurred in the Asylum). Of these 119 cases, 25 occurred in Colney Hatch Asylum, namely, 20 of enteric fever, 2 of scarlet fever, and 3 of erysipelas.

Epidemics.—The number of measles cases notified was 292, as compared with 15, 19, 142, and 273 in the four preceding years, the incidence having been greatest in the month of April. Scarlet fever also was prevalent, mainly in the summer and autumn, 56 cases, compared with 23 in the previous year. Of the 26 cases of enteric fever, 20 occurred in the Asylum, the source of which very careful inquiry has not thrown any light upon. On the other hand, whooping-cough and diarrhoea have been much less prevalent.

Isolation Hospital.—There is no isolation hospital in the District, and arrangements have been made with the Enfield, Finchley, and Hornsey Authorities for a limited number of beds for scarlet fever and diphtheria. In the summer this proved inadequate, and 2 cases were nursed at home, and were provided with nurses for the purpose. The Finchley and Hornsey Authorities or the Barnet Workhouse provided an ambulance for the transport of infectious cases. Clothes, &c., are removed to Finchley to be disinfected.

Sanitation.—The mortuary of the Finchley District Council, which is situated near the western boundary of Friern Barnet, is used by arrangement. The sewage

works are situated on the southern boundary, in the District of Wood Green, and within 100 yards of a small brook into which the effluent flows. Alterations and improvements have recently taken place, and three new bacteria beds have been constructed. There is a separate system of sewerage for surface waters and soil drainage. The system of shaft ventilators to the sewers is being extended. The collection of house refuse is undertaken by the Council fortnightly, and the refuse taken chiefly to the sewage farm. A number of roads have been made up. The question of a constant, in place of an intermittent supply of water from the Barnet Water Company, is receiving the attention of the Council.

GREENFORD URBAN DISTRICT.

Census 1901.

Area in acres	3,041
Inhabited houses	162
Total tenements	179
Population, 1891	660
„ 1901	819

Medical Officer of Health, G. Hope, D.P.H., L.R.C.P., M.R.C.S.

Estimated population, 919.

Births, 22; birth-rate, 23·9.

Deaths, 10; death-rate, 10·8.

Deaths under 1 year, 2; infantile mortality-rate, 90·9.

Statistics.—No deaths occurred from the scheduled notifiable diseases for the seventh consecutive year. The zymotic death-rate was nil.

Infectious Diseases Notification.—The Act has been in force since 1892. The cases notified during the year were 3 of diphtheria, 2 of erysipelas, and 3 of scarlet fever; total, 8.

Epidemics.—None.

Isolation Hospital.—Arrangement has been made with the Ealing Council to provide accommodation for infectious cases, and with Ealing and Hanwell for smallpox cases specially.

Sanitation.—The bye-laws for new streets and buildings have been approved. The Infectious Diseases (Prevention) Act, 1890, has been adopted. It is suggested that the Public Health Amendment Act, 1890, and Part III of the Housing of the Working Classes Act, 1890, should also be adopted.

HAMPTON URBAN DISTRICT.

Census 1901.

Area in acres	2,036
Inhabited houses	1,344
Total tenements	1,461
Population, 1891	5,822
„ 1901	6,813

Medical Officer of Health, Wentworth Tyndale, M.B.

Estimated population, 6,850.

Births, 180; birth-rate, 26·27.

Deaths, 73; death-rate, 10·6 (exclusive of 3 non-residents).

Deaths, under 1 year, 27; infantile mortality-rate, 150.

Statistics.—The principal zymotic diseases caused 8 deaths, equal to a rate of 1·1 per 1,000, as compared with 0·5 and 2·3 in the two previous years.

Infectious Diseases Notification.—The Act has been in force since November, 1891. During the year 37 cases of dangerous infectious diseases were notified, exclusive of 7 cases of measles.

Epidemics.—A mild type of scarlet fever was somewhat prevalent during the summer and autumn. A parent was prosecuted and fined for failing to notify that her child was suffering from scarlet fever.

Isolation Hospital.—A site of 7 acres has been purchased on the border of the District for the purpose of erecting an isolation hospital in the near future. The tenure of Tolworth Hospital, Surbiton, Surrey, is approaching termination.

Water Supply.—Five samples of well water were examined, and one found to be polluted. Two wells were closed, and supply laid on to the premises from the Company's main. Very few houses in the District now depend upon wells for the domestic supply of water.

Sanitation.—The smoke from the shafts of the waterworks still cause trouble. The soap factory is conducted satisfactorily. Four houses which were closed in the previous year have been demolished. Six houses have been closed by the owners as insanitary. A number of artisans dwellings have been and are being built, and the Council has also acquired a site for the purpose. Cesspools are

being abolished, and during the year 153 houses were re-drained and connected to the sewers. Some houses found draining into the Thames were also connected to sewers. A number of roads have been made up and taken over by the Council.

HAMPTON WICK URBAN DISTRICT.

Census 1901.

Area in acres	..	..	..	1,314
Inhabited houses	..	..	..	520
Total tenements	..	..	..	567
Population, 1891..	..	..	..	2,378
„ 1901..	..	..	..	2,606

Medical Officer of Health, Th. Günther, M.D.

Estimated population, 2,606.

Births, 44; birth-rate, 16·88.

Deaths, 36; death-rate, 13·8 (exclusive of 5 non-residents, and inclusive of 3 residents dying beyond the District.)

Deaths under 1 year, 5; infantile mortality-rate, 113.

Statistics.—From the deaths 5 non-residents are excluded, and 3 residents dying beyond the District included—2 in the Workhouse Infirmary and 1 in the Cottage Hospital. The deaths from the principal zymotic diseases were 2, equal to a rate of 0·76 per 1,000, as compared with 3 deaths in the previous year.

Infectious Diseases Notification.—The Act has been in force since January, 1890. During the year 14 cases were notified, as compared with 6 in the previous year. Chicken-pox was made a notifiable disease on February 3rd for 6 months.

Epidemics.—Whooping-cough was prevalent in the spring and summer. Of diphtheria 5 cases were notified, a large number for this District. No case of smallpox occurred.

Isolation Hospital.—The provision for the isolation of infectious cases is still under consideration. The South Mimms smallpox hospital would take a case of smallpox “provided there is room.”

Sanitation.—A beer shop admitting lodgers into common rooms was kept under close observation on account of smallpox. [The conditions appear to be those of a *common lodging house*.—J. F. J. S.] The Council have decided upon a weekly collection of refuse. Plans have been prepared for a surface water scheme of drainage for the District. The Shone ejector at the Park gate requires duplicating. The Kingston sewage works on the Surrey side of the river have given less cause for complaints of smells. Bacterial processes are being conducted experimentally.

HANWELL URBAN DISTRICT.

Census 1901.

Area in acres	1,067
Inhabited houses	1,781
Total tenements	2,024
Population, 1891	6,139
„ 1901	10,438

Medical Officer of Health, G. Hope, D.P.H., L.R.C.P., M.R.C.S.

Estimated population, 10,757.

Births, 316 ; birth-rate, 29·3.

Deaths, 121 ; death-rate, 11·2, including 5 deaths in the Central London District Schools.

Deaths under 1 year, 50 ; infantile mortality-rate, 158·2.

Statistics.—The proportion of population, births and deaths in the Brentford Union Workhouse is not included in the above statistics. The number of deaths from the principal zymotic diseases was 14, equal to a rate of 1·3 per 1,000, as compared with 10 deaths in the previous year.

Infectious Diseases Notification.—The Act has been in force since March, 1890. During the year 134 cases of the scheduled infectious diseases were notified, and of them 65 occurred in the Central London District Schools, namely, 57 of scarlet fever and 8 of diphtheria. In addition, 18 cases of chicken-pox were notified, of which 9 occurred in the Central London District Schools.

Epidemics.—There is no previous record of typhus fever in the District, but this year 6 cases, with 1 death, occurred in Graham Gardens, an overcrowded part. All the cases were in one family, and it was promptly prevented from further spreading. There was no smallpox in the District, and the population is well protected by vaccination.

Isolation Hospital.—A hospital has been provided for smallpox by a joint Hospital Committee, composed of

representatives from Ealing, Hanwell and Greenford. There is no hospital for other infectious diseases.

Sanitation.—There was no Sanitary Inspector for some time. The District “has very rapidly budded into a suburb.” A Sanitary Committee has been appointed. The Infectious Diseases (Prevention) Act, 1890, has been recently adopted, and it is suggested that the Public Health (Amendment) Act, 1890, Part III, should also be adopted.

HARROW-ON-THE-HILL URBAN DISTRICT.

Census 1901.

Area in acres	2,028
Inhabited houses	1,893
Total tenements	1,956
Population, 1891	6,210
„ 1901	10,220

Medical Officer of Health, J. Fletcher Little, M.B., M.R.C.P.

Estimated population, 10,540.

Births, 238 ; birth-rate, 22·5.

Deaths, 96 ; death-rate, 9·1 (inclusive of 6 deaths in the Hendon Workhouse).

Deaths under 1 year, 29 ; infantile mortality-rate, 121·8.

Statistics.—In the Hendon Union Workhouse there were 6 deaths of Harrow residents, 4 at ages between 25 and 65, and 2 over 65 years, the causes of which were—1 diarrhoea, 1 phthisis, and 4 other causes. The principal

zymotic diseases caused 23 deaths (16 of which were from infantile diarrhoea), equal to a rate of 2·2 per 1,000, as compared with 0·28, 1·9, and 2·2 in the three previous years.

Infectious Diseases Notification.—The Act has been in force since 1890. During the year 43 cases of infectious diseases were notified (26 of which were scarlet fever), as compared with 21, 37, and 40 cases in the three previous years.

Epidemics.—Infantile diarrhoea and scarlet fever were prevalent. There were no cases of smallpox.

Isolation Hospital.—Twenty-three cases of scarlet fever, and 1 of typhoid, all of which recovered, were admitted to the isolation hospital during the year. “When the plans for the additions are carried out there will be adequate provision for treating cases of enteric (typhoid) fever.” A conference of Sanitary Authorities was called by the Middlesex County Council, on the initiative of the Harrow Council, to consider the provision of smallpox hospital accommodation. The Harrow Council erected Berthon tents to afford temporary accommodation for smallpox.

Water Supply.—During the year there were several failures of the supply of the Colne Valley Water Company.

Sanitation.—The consideration of collecting the dust twice a week is advised. The sewage disposal scheme at Greenhill is progressing. At Newton Fields it will soon be necessary to extend the sewage farm or provide bacterial beds. Both sewage effluents have continued good.

It is recommended to number the houses for proper identification. It is suggested that the Mount Park District should be incorporated with Harrow. It is again recommended to institute classes for the instruction of dairymen in the purity of milk samples. The Council approved of the plans for 102 new houses, 92 flats, 8 shops and dwellings combined, 30 additions and alterations, and 7 other buildings. The bye-laws with regard to surface drains are being revised. The Roxeth Recreation Ground is being laid out. The old Harrow Waterworks have been purchased as a site for public baths. It is recommended that assistance be provided to make the necessary returns as to sanitation.

HENDON URBAN DISTRICT.

Census 1901.

Area in acres	8,382
Inhabited houses	3,379
Total tenements	4,397
Population, 1891	15,843
„ 1901	22,450

Medical Officer of Health, F. W. Andrew, M.R.C.S.,
L.R.C.P.

Estimated population (not stated). ? 21,953.

Births, ? 616 ; birth-rate, 28·06 (exclusive of 55 in the Hendon and Rockhall Infirmaries*).

Deaths, 234 ; death-rate, 10·6 (exclusive of 187 in the three Poor Law Institutions, and inclusive of 8 in Hendon Workhouse*).

Deaths under one year, 80 ; infantile mortality-rate, 129·8 ?

*Statistics.**—At the census of 1901, the Hendon Workhouse and Infirmary contained 309 inmates and 18 officials, the Central London (Cleveland Street) Sick Asylum 281 inmates and 52 officials, the Rockhall Infirmary (of Willesden Workhouse) 52 inmates and 6 officials. A total number of 80 deaths under one year was registered, but the number to be deducted does not appear.

In reference to Hendon Union Workhouse, the following figures are supplied :—

	Total of Union.	Hendon only.
Average number of inmates ..	129	63
Number of deaths	67	8
„ „ births	48	9
„ „ deaths under one year	9	1

The principal zymotic diseases appear to have caused 34 deaths, equal to a rate of 1·59, calculated on the census 1901 population, less 1,042 inmates in the three Poor Law Institutions. In the previous year the number of deaths from the same diseases was 39.

Infectious Diseases Notification.—The Act has been in force since 1891. During the year 139 cases were notified, but of the 8 enteric fever cases, 4 occurred in the Rockhill Infirmary of the Willesden Council, and 1 in the Central London (Cleveland Street) Sick Asylum. In the three previous years the numbers of cases notified were 99, 124, and 138 respectively.

Epidemics.—Scarlet fever was prevalent—83 cases, as compared with 51 in the previous year. In May and June some 11 cases of smallpox occurred, having been imported by a family arriving from the East, but the outbreak was stopped by prompt measures. In December, another case occurred in a man who worked in Holborn.

Isolation Hospital.—83 cases were admitted to the hospital. 16 of these were from other Districts, namely, 13 from Hendon Rural District and 4 from Friern Barnet Urban District. A bath room has been recently built. A new wing, as a convalescent ward, is under consideration. Accommodation is required for diphtheria cases. A new ambulance has been provided. It is thought advisable that a vehicle should be provided specially for smallpox cases.

Disinfection.—Steps have been taken to erect a high-pressure steam apparatus.

Sanitation.—It is recommended that a suitable mortuary be built for the growing requirements of the District. During the past 10 years 867 houses have been built, the majority for the working classes. The ultimate disposal of house refuse is yearly becoming more difficult. It is taken to the sewage farm and, after sorting out unsuitable matters, used for making roads. The erection of a proper destructor is recommended. The appointment of an Assistant Inspector is also recommended.

VACCINATION RETURNS FOR THE YEARS 1900 AND 1901. HENDON URBAN DISTRICT.

Year ending 31st December.	No. of births registered during previous year.	No. of these births duly entered in register.					No. of these births remaining unentered in register.		No. of these births unac- counted for.	No. at <i>all ages</i> vaccin- ated during the year (pri- mary).
		Success- fully vaccinated.	Insus- cepti- ble of vacci- nation.	Had small- pox.	Conscien- tious objection certificates.	Dead, unvac- cinated.	Removed to other Districts and cases not found.	Postpone- ment by medical certificate.		
1900	656	410	6	—	25	100	40	3	72	448
1901	609	475	4	—	25	50	41	6	8	651

[NOTE.—In order to complete the statistics, I have assumed that the population in the middle of 1901 has been taken as 21,953, this number having been obtained from the 1901 census population 22,450, and the 1891 census population 15,843, a difference of 6,607 in 10 years, and 660 in 1 year, and 145 in 1 quarter, which last number, added to 22,450, produces 22,595, from which the census populations of Hendon Workhouse, 309, Rockhall Infirmary (Willesden Workhouse), 52, and Central London Sick Asylum, 281, making a total of 642, being deducted, leave a nett population of 21,953. Calculated upon this population, 616 births represent 28·06 per 1,000, 234 deaths represent 10·66 per 1,000, and the 80 deaths under 1 year of age represent 129·8 per 1,000 births.—J. F. J. S.]

HESTON AND ISLEWORTH URBAN DISTRICT.

Census 1901.

Area in acres	6,859
Inhabited houses	5,684
Total tenements	6,072
Population, 1891	26,004
„ 1901	30,863

Medical Officer of Health, E. J. Steegmann, M.B., D.P.H.

Estimated population, 30,959 (presumably including the whole of the Union Workhouse).

Births, 874; birth-rate, 28·5 (presumably including the Union Workhouse).

Deaths, 487; death-rate, 15·73 (exclusive of 191 non-residents in Union Workhouse and elsewhere).

Deaths under 1 year, 140; infantile mortality-rate, 160·1.

Statistics.--The public institutions in the District are—Dockwell Smallpox Hospital (Richmond Municipal Borough and Heston and Isleworth Urban District), Mogden Isolation Hospital (Richmond Municipal Borough and Heston and Isleworth Urban District), and Brentford Union Workhouse. The number of deaths of non-residents were as follows:—

Districts.	Males.	Females.	Total.
Acton, Brentford Union ..	26	24	50
Brentford „ „ ..	16	12	28
Chiswick „ „ ..	13	16	29
Ealing „ „ ..	14	16	30
Greenford „ „ ..	1	—	1
Hanwell „ „ ..	2	1	3
Twickenham „ „ ..	19	9	28
Richmond (in Hospitals) ..	4	—	4
Forest Gate (?)	1	—	1
	96	78	174
Hounslow Barracks	16	1	17
	112	79	191

The principal zymotic diseases caused 80 deaths, equal to a death-rate of 2·58 per 1,000. The number in the previous year was 54.

Infectious Diseases Notification.—The Act has been in force since 1890. During the year 185 cases of scheduled diseases were notified, and 573 cases of measles, as compared with 275 scheduled cases and 665 measles cases in the previous year, and 122 plus 32 in 1899. The notification of measles was rescinded on 16th July, 1901.

Bacteriological Examinations.—Facilities are provided for obtaining bacteriological examinations in cases of diphtheria and typhoid.

Epidemics.—Measles was prevalent again this year, and whooping-cough also. 5 cases of smallpox occurred, with 2 deaths.

Isolation Hospital.—During the year, 210 cases were admitted to the Mogden Isolation Hospital, distributed as follows:—

	Scarlet Fever.	Diph- theria.	Enteric Fever.	Other Dis- eases.	Total.
Heston and Isleworth District	92	30	6	2	130
Borough of Richmond	44	27	7	2	80
Total	136	57	13	4	210

The case-mortality, since the opening, has been—in scarlet fever, 1·4 per cent., diphtheria 12·1, enteric fever 10·6, and other diseases 25 per cent., a total of 4·9 per cent. mortality.

Into the Dockwell Smallpox Hospital 8 cases of smallpox were admitted: 3 from the Borough of Richmond, and 5 from Heston and Isleworth. There were 2 deaths.

Sanitation.—The house drains were tested wherever there was reason to think that infectious disease was due

to defects. In 476 houses such tests were made to 136 drainage systems. The sanitary work is set out in the tables.

HORNSEY URBAN DISTRICT.

Census 1901.

Area in acres	2,875
Inhabited houses	12,571
Total tenements	15,571
Population, 1891	44,523
„ 1901	72,056

Medical Officer of Health, Henry Clothier, M.D.

Estimated population, 73,500.

Births, 1,511; birth-rate, 20·55.

Deaths, 617; death-rate, 8·39. Inclusive of 20 in Edmonton Workhouse and 2 elsewhere, and exclusive of 2 non-residents.

Deaths under 1 year, 127; infantile mortality-rate, 84·05.

Statistics.—In Edmonton Workhouse the Hornsey inmates numbered 49, and the deaths 20; these have been included in the 617 deaths. The principal zymotic diseases caused 40 deaths, equal to a rate of 0·54 per 1,000 inhabitants. In the three previous years the number of deaths from the same causes were 52, 65, and 52, respectively.

Infectious Diseases Notification.—The Act has been in force since January, 1890. During the year 725 cases of dangerous infectious diseases were notified, as compared with 372, 517, and 350 cases, in the three previous years.

Epidemics.—Ten cases of smallpox were notified. Scarlet fever was prevalent, 501 cases (without a single death), as compared with 186 cases in the previous year; diphtheria was also somewhat more prevalent, 134 cases, as compared with 107. Measles caused 8 deaths, as compared with 4 in 1900.

Isolation Hospital.—365 cases were admitted to the Isolation Hospital, namely, 331 of scarlet fever, 30 of diphtheria, and 4 of typhoid fever. The nursing staff consists of matron, home sister and ward sister, a night superintendent, and 13 nurses and probationers.

Sanitation.—23 additional shafts have been erected for the ventilation of the public sewers, bringing the total up to 190. Reflushing of the sewers is systematically continued. $1\frac{1}{2}$ miles of sewers and culverts have been constructed. In the destructor furnaces, 19,283 tons of house refuse, and 358 tons of vegetable refuse have been destroyed. $25\frac{1}{2}$ tons of fish offal have been received as trade refuse, and disposed of as manure; arrangements are being made to cremate it. New Streets and Buildings Bye-laws have come into force.

KINGSBURY URBAN DISTRICT.

Census 1901.

Area in acres	1,829
Inhabited houses	140
Total tenements	149
Population, 1891	581
„ 1901	757

Medical Officer of Health, F. W. Andrew, M.R.C.S.,
L.R.C.P.

Estimated population, 757.

Births, 16; birth-rate, 20·1.

Deaths, 5; death-rate, 6·6.

Deaths under 1 year, 1; infantile mortality-rate, 62·0.

Statistics.—Kingsbury was formerly a Parish of the Hendon Rural Sanitary District; in December, 1894, the Wembley Urban District was created out of part of the Harrow Parish and of the whole of the Kingsbury Parish of the Hendon Rural District; in December, 1900, the Kingsbury Ward of the Wembley Urban District was created a separate Urban District. There was one death from diarrhoea during the year.

Infectious Diseases Notification.—The Act has been in force since 1891 before the separation of the District.

Isolation Hospital.—For smallpox arrangement has been made with the Willesden Urban District Council to take cases into their Smallpox Hospital at Honeypot Lane at one guinea per week. Of the 16 children born 12 were vaccinated successfully, 1 died, 1 was exempted on conscientious objection, and 2 remain unvaccinated.

Sanitation.—Important improvements are being made in the sewerage and drainage of the District, which has hitherto created considerable nuisance and contamination of the River Brent. A scheme of sewerage, estimated to cost £20,000, has been adopted, of which part only is to be carried out at present, on account of the heavy local rate necessary. New bye-laws have been made with regard to

the removal of dust refuse, cleansing of earth-closets, privies, ash-pits, and cesspools, the construction of new streets and buildings, and the model regulations for cow-sheds, dairies, and milk shops, have been adopted.

SOUTHALL-NORWOOD URBAN DISTRICT.

Census 1901.

Area in acres	2,575
Inhabited houses	1,911
Total tenements	2,026
Population, 1891	7,891
„ 1901	13,200

Medical Officer of Health, J. D. Windle, M.D., Ch.B., M.R.C.S.

Estimated population, 10,477 (excluding the London County Council Asylum, including St. Marylebone School).

Births, 360 ; birth-rate, 34·3.

Deaths, 168 ; death-rate, 16·0 (including 3 deaths in the Workhouse, Uxbridge Rural District).

Deaths under 1 year, 65 ; infantile mortality-rate, 180·5.

Statistics.—The actual increase in the census population, apart from the addition of the North Hyde District in 1894, has been 5,304, of which 875 are inmates of the two large institutions. At the census, of the 13,200 inhabitants there were 2,553 inmates and 282 officers (total, 2,835) in the London County Lunatic Asylum, known as Hanwell, and 381 inmates and 31 officers (total, 412) in the Workhouse School of St. Marylebone, leaving a population of 9,953. In the estimated population the Asylum is excluded and the School included.

The deaths from the principal zymotic diseases numbered 33, equal to a rate of 3·15 per 1,000.

Infectious Diseases Notification.—The Act has been in force since July, 1891. The number of cases notified during the year was 85 (including 9 cases of erysipelas, and 2 of enteric fever in the London County Asylum), as compared with 105, 174, and 120 in the three previous years.

Epidemics.—There were two cases of smallpox. Diarrhœa was prevalent, and caused 24 deaths, 19 of which were under 1 year of age. Other infectious diseases were less prevalent than in previous years.

Isolation Hospital.—Plans are being prepared for the isolation hospital to be erected on the Mount Pleasant site.

Water Supply.—At the beginning of 1901 the water supplied by the South-West Suburban Water Company was under suspicion as to its purity, but since the spring there has been no further reason to suspect impurity of the public supply.

Sanitation.—All houses are supplied with galvanised iron dust-bins provided with covers, and the collection of dust is weekly. It is suggested that in the near future the provision of a refuse destructor will necessitate consideration. The sewage disposal works are being improved and extended. The cow-sheds, dairies, and milkshops, the slaughter-houses, and the bakehouses are under constant supervision. The Adoptive Acts, Bye-laws and Regulations in force in the District are shown in the table of Adoptive Acts, &c., at the end of this Report.

SOUTHGATE URBAN DISTRICT.

Census 1901.

Area in acres	3,597
Inhabited houses	2,818
Total tenements	3,202
Population, 1891	10,970
„ 1901	14,993

Medical Officer of Health, A. Sidney Ransome, B.A.,
M.B., D.P.H.

Estimated population, 15,200.

Births, 375; birth-rate, 24·6.

Deaths, 142; death-rate, 9·3 (exclusive of 6 at the Metropolitan Asylums Board Hospital, Winchmore Hill, and inclusive of 8 at the Workhouse, Edmonton).

Deaths under 1 year, 35; infantile mortality-rate, 93·6.

Statistics. — At the Metropolitan Asylums Board's Northern Fever Hospital, Winchmore Hill, at the census 1901, there were 232 inmates and 206 officers; total, 438 persons. Into this hospital 4,529 cases were admitted during the year, namely, 3,964 of scarlet fever, and 565 of diphtheria, and there were 5 deaths from scarlet fever. The principal zymotic diseases caused 20 deaths, equal to a rate of 1·3 per 1,000 of population, as compared with 1·0, 2·7, and 1·9 in the three previous years.

Infectious Diseases Notification.—The Act has been in force since December, 1889. During the year 108 cases of dangerous infectious diseases were notified, as compared with 90, 170, and 79 in the three previous years.

Bacteriological Examinations.—During the year 37 specimens were sent to the Jenner Institute of Preventive Medicine for bacteriological examination. These specimens embraced diphtheria, typhoid fever, and phthisis. Handbills giving instructions as to the precautions to be taken in cases of consumption, measles, and whooping-cough, are left at infected houses.

Epidemics.—Eight cases of smallpox were notified, of which 7 were removed to the South Mimms Hospital and 1 died before removal. Measles was prevalent in New Southgate during the second quarter of the year.

Isolation Hospital.—The hospital was formally opened on the 4th January, 1901. There is a steam disinfecter also for use on the premises.

Water Supply.—Practically the whole District is now supplied by the New River Company, and very few houses are now dependent on wells. Three samples of water from wells were found polluted, and the wells closed.

Sewerage.—104 yards of new sewers were laid, and 176 houses connected to the sewers. The sewers are regularly flushed.

Pollution of Streams.—Pymmes Brook has considerably improved since periodical cleansing has been taken in hand by the Middlesex County Council. It is still polluted by the East Barnet Sewage Farm. The polluted pond on Winchmore Hill Green has been entirely filled up, and a small concreted basin and fountain in the centre constructed with a supply of water from the New River Company.

Sanitation Generally.—The matter of housing of the working classes is receiving consideration. Many roads have been made up. The paving and draining of back entrance ways requires attention.

STAINES URBAN DISTRICT.

Census 1901.

Area in acres ..	..	..	1,918
Inhabited houses ..	..	..	1,367
Total tenements ..	..	..	1,438
Population, 1891 ..	..	..	5,535
„ 1901 ..	..	..	6,688

Medical Officer of Health, F. C. Tothill, M.B., C.M.

Estimated population, 6,708.

Births, 174 ; birth-rate, 25·9.

Deaths, 97 ; death-rate, 14·4. inclusive of 11 in the Workhouse, Staines Rural District.

Deaths under 1 year, 18 ; infantile mortality-rate, 103·4.

Statistics.—The principal zymotic diseases caused 19 deaths, equal to a rate of 2·8 per 1,000 of population. In the previous year the deaths from the same causes were 8 in number.

Infectious Diseases Notification.—The Act has been in force since 1890. The number of cases notified during the year was 83, as compared with 77 and 76 in the two previous years.

Epidemics.—The number of diphtheria was double and of scarlet fever cases was half the number in the previous year. The diphtheria was principally confined to children attending the Board Schools, and the Infant School in Bridge Street was closed for three weeks.

Isolation Hospital.—There is none in the District. There is a temporary iron building in Stanwell Parish for small-pox.

Water Supply.—Last year there was an outbreak of enteric fever in Yeoveney, and the wells were closed; since then there has been no zymotic disease there, although “the inhabitants have no water supply, except what they can obtain from the River Colne.”

Sanitation Generally.—Owing to the practical completion of the Staines Reservoirs works the overcrowding has disappeared. There was no flood of any magnitude during the year.

SUNBURY URBAN DISTRICT.

Census 1901.

Area in acres	2,659
Inhabited houses	938
Total tenements	979
Population, 1891	4,099
„ 1901	4,544

Medical Officer of Health, C. Dwight Morris, L.R.C.P.

Estimated population, 4,619.

Births, 131; birth-rate, 28·3.

Deaths, 63; death-rate, 13·6.

Deaths under 1 year, 17; infantile mortality rate, 129·8.

Statistics.—The principal zymotic diseases caused 6 deaths, equal to a rate of 1·3 per 1,000 of population.

Infectious Diseases Notification.—The Act has been in force since 1890. During the year the number of cases notified was 18, as compared with 11, 17 and 12 in the three previous years.

Epidemics.—The number of scarlet fever cases was 12, as compared with 6 in the previous year. Whooping-cough and mumps were epidemic during March and April.

Isolation Hospital.—Arrangement was made with the Staines Rural District to take smallpox cases, should any occur, into the temporary iron hospital at Stanwell.

Sanitation.—The broad irrigation method of sewage disposal has been supplemented by the construction of screening chambers, through which the sewage passes before being pumped on to the land; 642 yards more sewers have been constructed, and 64 more house connections made, bringing the total of these up to 600. The Sunbury House Estate has been opened up for building. 25 new buildings have been erected in the District during the year. The East London Water Company are constructing additional filter beds. The new mortuary has been found a great boon.

TEDDINGTON URBAN DISTRICT.

Census 1901.

Area in acres ..	..	..	1,214
Inhabited houses	..	..	2,754
Total tenements	..	..	3,049
Population, 1891	..	..	10,052
„ 1901	..	..	14,037

Medical Officer of Health, Th. Günther, M.D.

Estimated population, 14,029.

Births, 359 ; birth-rate, 25·6.

Deaths, 134 ; death-rate, 9·55 (inclusive of 6 residents dying in the workhouse infirmary, and exclusive of 2 non-residents).

Deaths under 1 year, 40 ; infantile mortality-rate, 111.

Statistics.—The deaths from the principal zymotic diseases numbered 12, equal to a rate of 0·85 per 1,000 of population ; the number in the previous year was 25 deaths.

Infectious Diseases Notification.—The Act has been in force since February, 1890. During the year 70 cases were notified, as compared with 66, 75, and 41 in the three previous years. This is exclusive of chicken-pox, which was made a notifiable disease for 6 months commencing 3rd March.

Epidemics.—At the beginning of the year influenza was prevalent, but of a mild type. A case of smallpox occurred in January, 1902, which was, after considerable difficulties, removed to the Croydon and Cheam Smallpox Hospital ; another case occurred in March, 1902, which was also removed to the same hospital. The most careful precautions were taken to prevent the spread of the disease.

Isolation Hospital.—“ The negotiations with neighbouring authorities for making provision for the isolation of infectious cases have led at present to no result.”

Sanitation.—An additional site for a burial ground is under consideration. The sanitary condition of the island and river camps in August were found satisfactory. The regular inspections were made and also special inspections for the abatement of particular nuisances. Five samples of well water were examined; one was found polluted and the well closed. The Grand Junction water supply was found satisfactory. The sewage disposal works produce an effluent of a satisfactory character, and bacterial treatment is under consideration. 31 existing houses and 114 new houses have been connected to the sewerage system and 22 cesspools closed. Several roads have been properly made up with advantage.

TOTTENHAM URBAN DISTRICT.

Census 1901.

Area in acres	3,013
Inhabited houses	16,519
Total tenements	21,910
Population, 1891	71,343
„ 1901	102,541

Medical Officer of Health, J. F. Butler-Hogan, B.A., M.D.

Estimated population, 103,243.

Births, 3,179; birth-rate, 30·06.

Deaths, 1,510; death-rate, 14·6 (excluding 40 deaths in the North-Eastern Hospital, Metropolitan Asylums Board?).

Deaths under 1 year, 431; infantile mortality-rate, 135·5.

Statistics.—The largest public institution in the District is the North-Eastern Fever Hospital of the Metropolitan Asylums Board, which, at the census of 1901, contained

212 inmates, and 187 officials. The number of deaths from the principal zymotic diseases during the year was 387, including 8 of the Tottenham smallpox cases at the South Mimms Smallpox Hospital, and of a large number of scarlet fever, diphtheria, and enteric fever cases in the North-Eastern Hospital of the Metropolitan Asylums Board. This number, 387, represents a death-rate of 3·7 per 1,000 from the principal zymotic diseases.

Infectious Diseases Notification.—The Act has been in force since 1890. During the year, 1,133 cases were notified, as compared with 794, 908, and 740 in the three previous years.

Epidemics.—49 cases of smallpox were notified, 3 of which proved not to be smallpox; the remaining 46 were removed to South Mimms Hospital, where 8 of them died. Diphtheria, scarlet fever, and enteric fever were more prevalent than in the previous year. Measles and whooping-cough were less prevalent.

Isolation Hospital.—46 smallpox cases were removed to the South Mimms Hospital, the remainder of the 588 cases removed to hospital were presumably admitted to the North-Eastern Hospital of the Metropolitan Asylums Board, St. Ann's Road.

Water Supply.—5,618 yards of new water mains have been laid, and 48 hydrants fixed. The water fittings of 11,520 houses have been inspected. The increased yield of water at the Park Pumping Station has enabled the supply from the East London Water Company to be shut off.

Drainage and Sewerage.—The total length of soil and surface water sewers to be kept clear and in working order is 250 miles. A number of sewers have been re-laid, and other works of improvement and repair executed.

Sanitation Generally.—Many footways have been improved. Refuse destructor, municipal baths, and wood paving are engaging attention, also scheme for housing the working classes, recreation ground, revision of Council's water regulations, plans for various improvements, and paving private streets.

TWICKENHAM URBAN DISTRICT.

Census 1901.

Area in acres	..	..	..	2,421
Inhabited houses	..	..	..	4,205
Total tenements	..	..	..	4,634
Population, 1891	..	..	..	16,027
„ 1901	..	..	..	20,991

Medical Officer of Health, W. Marston Clark, M.R.C.S., D.P.H.

Estimated population, 20,991.

Births, 576; birth-rate, 27·42.

Deaths, 249; death-rate, 11·8 (exclusive of 5 non-residents).

Deaths under 1 year, 68; infantile mortality-rate, 118·0.

Statistics.—St. John's Hospital at the census 1901 contained 10 inmates, and 7 officials. The deaths from

the principal zymotic diseases numbered 33, equal to a rate of 1.57 per 1,000 of population, practically the same as in the two previous years.

Infectious Diseases Notification.—The Act has been in force since January, 1890. The number of cases notified during the year was 159, as compared with 153, 194, and 65 in the three previous years.

Epidemics.—Scarlet fever was prevalent, and a few more deaths were attributed to measles.

Isolation Hospital.—During the year 65 cases of scarlet fever were admitted to the Cottage Hospital, and an additional cottage and a house was taken to extend the accommodation. They are known as Mereway Hospitals and Cross Deep House. A site has been provisionally secured for a permanent hospital. A large proportion of the inhabitants availed themselves of the benefit of re-vaccination against smallpox.

Sanitation.—Many hundreds of persons availed themselves of the public bathing place during the bathing season. The experimental bacteriological system of sewage disposal having given satisfaction, plans, specifications, and estimates have been prepared for suggested works. The Moor Mead and the Green Recreation Grounds have been improved, and an additional open space is about to be secured. The sanitary conveniences attached to licensed premises have received careful attention. 258 plans for new houses, and 28 for alterations and additions were approved.

UXBRIDGE URBAN DISTRICT.

Census 1901.

Area in acres ..	..	..	868
Inhabited houses ..	..	..	1,922
Total tenements ..	..	..	2,013
Population, 1891 ..	..	..	8,206
„ 1901 ..	..	..	8,585

Medical Officer of Health, A. Charpentier, M.D., D.P.H.

Estimated population, not stated (? 8,585).

Births, 243; birth-rate, 28·3.

Deaths, 117; death-rate, 13·6 (inclusive of 15 at the Workhouse, and 2 at the Joint Hospital).

Deaths under 1 year, 26; infantile mortality-rate, 107.

Statistics.—The deaths of 15 residents at the Union Workhouse in the Uxbridge Rural District are included in the statistics, and 2 at the Joint Hospital. The deaths from the principal zymotic diseases numbered 11, equal to a zymotic death-rate of 1·2; in the previous year there were 8 deaths from the same causes.

Infectious Diseases Notification.—The Act has been in force since January, 1890. 77 cases were notified during the year, as compared with 44, 60, and 143, in the three previous years.

Epidemics.—An outbreak of diphtheria occurred towards the end of the year, the origin of which could not be

accounted for. A mild form of scarlet fever connected with an elementary school broke out early in the year. 9 cases of smallpox occurred in the District; they were all isolated.

Isolation Hospital.—An emergency Smallpox Hospital, erected by the Joint Hospital Board, saved the District from a more severe outbreak. 32 cases of scarlet fever and 21 of diphtheria were removed to the Joint Hospital. The parents of three children allowed in a public street whilst suffering from scarlet fever were successfully prosecuted. A steam disinfecting apparatus is badly required to save burning the clothes of smallpox patients at considerable cost, and to disinfect the clothing of contacts.

Sanitation. — The housing question presses on the District, where there are many houses without through ventilation. A public mortuary is necessary. Public baths would be desirable, and also some open spaces. The town pump well has been closed as unfit for domestic use. The sewage works have been taken over by the International Purification Syndicate, and the effluent and works give no trouble. 25 new houses were certified for habitation during the year, and there are very few houses empty out of 2,040.

[NOTE.—I have assumed that the census population has been taken as a basis for the year, because the per mille figures calculated back produce the result 8,585.—J. F. J. S.]

WEALDSTONE URBAN DISTRICT.

Census 1901.

Area in acres	1,061
Inhabited houses	1,021
Total tenements	1,208
Population, 1891	2,440
„ 1901	5,901

Medical Officer of Health, G. H. Butler, L.R.C.P.,
M.R.C.S.

Estimated population, 6,550.

Births, 204 ; birth-rate, 31·3.

Deaths, 55 ; death-rate, 8·5 (inclusive of 3 residents dying elsewhere, and exclusive of 2 non-residents).

Deaths under 1 year, 24 ; infantile mortality-rate, 117·3

Statistics.—The principal zymotic diseases caused 15 deaths, equal to a death-rate of 2·29 per 1,000. In the previous year the number of deaths from the same cause was 5.

Infectious Diseases Notification.—The Act has been in force since 1891. During the year 61 cases were notified, as against 24, 40, and 24 in the three previous years.

Epidemics.—Whooping-cough was prevalent early in the year, and diarrhoea in the autumn. Measles was also prevalent in the autumn, and the Infant Department of the Board School was closed for three weeks. Scarlet fever was epidemic in this and the surrounding Districts, but the type was mild.

Isolation Hospital.—36 of the scarlet fever patients were removed to Watford Hospital, with which an arrangement exists. It is represented that an Isolation Hospital is urgently needed, and a good site is under consideration. For smallpox a small temporary hospital for 8 beds was erected, and remains suitably equipped.

Sanitation.—A new cemetery, within a short distance, and consisting of about 6 acres, has been provided. A mortuary is required, and also public conveniences. 3,313 yards of new sewers have been laid, and 135 new houses and 23 double tenement houses erected. Properly covered carts are recommended for dust removal. Several roads urgently require making up. The new works, of an expensive and elaborate nature, have been completed at the sewage farm, and there is great improvement. The usual inspections have been made.

WEMBLEY URBAN DISTRICT.

Census 1901.

Area in acres ..	..	..	4,564
Inhabited houses ..	..	..	833
Total tenements ..	..	..	905
Population, 1891 ..	..	..	3,023
„ 1901 ..	..	..	4,519

Medical Officer of Health, C. E. Goddard, M.D., M.R.C.S.,
L.R.C.P.

Estimated population, 4,550.

Births, 104; birth-rate, 22·8.

Deaths, 39; death-rate, 8·5.

Deaths under 1 year, 9; infantile mortality rate, 86·5.

Statistics.—The principal zymotic diseases caused 3 deaths, equivalent to a death-rate of 0·66. The deaths from the same causes in the previous year were 6.

Infectious Diseases Notification.—The Act has been in force since 1891. During the year 13 cases were notified, as compared with 18, 29, and 33 in the three previous years.

Epidemics.—None.

Isolation Hospital.—A cottage was made ready at Alperton for the isolation of smallpox. A useful horse ambulance has been arranged for at a very small cost.

Sanitation.—The settlement of gipsies is becoming almost a daily nuisance, and it may be necessary to engage men to evict them. The absence of a mortuary is reported as a serious inconvenience. The dust heaps adjoining the canal at Alperton have been covered with lime and ashes, and further importation from Chelsea and Willesden was stopped, so that the plague of flies has been lessened. It is feared that the Great Central Railway Works may import labour and cause overcrowding. Ventilating shafts are being erected to the sewers.

WILLESDEN URBAN DISTRICT.

Census 1901.

Area in acres ..	..	..	4,384
Inhabited houses ..	..	..	16,045
Total tenements ..	..	..	25,657
Population, 1891 ..	..	..	61,265
„ 1901 ..	..	..	114,811

Medical Officer of Health, D. S. Skinner, M.D.

Estimated population, 116,089 (excluding 559 residents in workhouses and asylums outside the District).

Births, 3,670; birth-rate, 31·7 (inclusive of 92 outside the District).

Deaths, 1,529; death-rate, 13·17 (inclusive of 213 outside the District, and exclusive of 9 non-residents inside).

Deaths under 1 year, 456; infantile mortality-rate, 124·2.

Statistics.—Outside the District 358 persons are residing in workhouses, and 201 in asylums, a total of 559 to be added to the estimated population of 116,089. In these institutions 92 births took place and 213 deaths, of which 76 occurred in the workhouse and 137 in the Metropolis. The 456 deaths under 1 year do not include 39 occurring outside the District. The deaths from the principal zymotic diseases numbered 263 (nearly half, 123, being due to summer diarrhoea), equal to a death rate of 2·25. In the two previous years the number of deaths from the same cause was 273 and 296 respectively.

Infectious Diseases Notification.—Notification has been in force since October, 1887. During the past year, 1,106 cases were notified, as compared with 735, 901, and 835 in the three previous years. The notification of chicken-pox was adopted for six months.

Epidemics.—Ten cases of smallpox occurred. Scarlet fever and diphtheria were very prevalent during the later part of the year, the former being of a mild type and the

latter more fatal. On the other hand, the deaths from measles, that numbered 52 in the previous year, fell to 8. Whooping-cough was somewhat more prevalent.

Isolation Hospital.—For smallpox isolation a field of 10 acres was rented in the parish of Kingsbury, and temporary buildings for 32 beds erected at the end of the year. The ten cases that had previously occurred were removed to South Mimms. A temporary shelter for contacts was also provided. The fever hospital accommodation consists of 44 beds for scarlet fever in the permanent and two iron buildings, 20 beds and cots for diphtheria, and in the observation block 12 beds for the isolation of doubtful and complicated cases. The enteric patients have to be placed in half of the observation block. During the year 470 cases were removed to hospital—namely, 7 of smallpox, 265 of scarlet fever, 190 of diphtheria, 7 of typhoid fever, and 1 of suspected plague.

Disinfection.—The Washington Lyon steam apparatus at the hospital disinfects not only for the hospital, but also for the whole District, and is found to be too small, and causes delay. The premises at Stonebridge Farm, used as a shelter for contacts, will later be used as a family shelter during disinfection.

Bacteriological Examinations.—These are conducted at the hospital in cases of diphtheria, and also for such cases outside when sent by medical men.

Vaccination.—The following are the returns for the last four years:—

Years.	No. of Births.	Successfully vaccinated.	Insusceptible.	Dead Unvaccinated.	Conscientious Objectors.	Postponed by Medical Certificate.	Gone away.	Unvaccinated.
1898	3,125	1,474	13	257	37	117	259	968
1899	3,375	1,615	24	345	63	76	91	1,161
1900	3,560	1,704	8	253	106	56	268	1,165
1901	3,670	2,351	12	304	120	40	280	563

“The total number of successful vaccinations of children of all ages up to 14 years in 1901, including the above, was 3,167.”

Sanitation.—With the ever-increasing duties house-to-house inspection gets crowded out, that other and more urgent matters may receive attention, and additional assistance is required for this purpose. For the collection of dust the District is divided into three parts, each having a separate contractor, and two Dust Inspectors are constantly supervising the work, and the collection is from house to house. The various premises were periodically inspected.

WOOD GREEN URBAN DISTRICT.

Census 1901.

Area in acres	1,625
Inhabited houses	6,048
Total tenements	7,426
Population, 1891	25,831
„ 1901	34,233

Medical Officer of Health, C. H. Conolly, M.R.C.S.

Estimated population, 34,350.

Births, 939 ; birth-rate, 27·33.

Deaths, 397 ; death-rate, 11·55 (inclusive of 1 in Edmonton Union, and exclusive of 2 non-residents).

Deaths under 1 year, 125 ; infantile mortality-rate, 133.

Statistics.—The deaths from the principal zymotic diseases numbered 70, equal to a rate of 2·03 per 1,000, as compared with 83 deaths from the same causes in the previous year.

Infectious Diseases Notification.—The Act came into force in March, 1890. During the year 221 cases were notified as compared with 213, 417, and 257 in the three previous years.

Epidemics.—Scarlet fever was somewhat more, and diphtheria somewhat less prevalent than in the previous year. Measles was more prevalent than usually, the deaths being 14, as compared with 8 in the year before. Diarrhoea was less prevalent. Chicken-pox has been made a notifiable disease.

Isolation Hospital.—The preliminary arrangements have been completed for the erection of the hospital on the White Hart Lane site, awaiting the sanction of the Local Government Board to a Loan. “The estimates provide for 44 beds for scarlet fever and diphtheria, at a cost of about £14,000 for buildings and furniture.” The 4 beds retained at the South Mimms Hospital for smallpox cases have been supplemented by 10 additional beds for 10 years at a cost of £125 per bed, the payments to be

spread over a period of 5 years. A shelter during disinfection is to be provided on the site of Moat House. A second ambulance has been ordered.

Disinfection. — The portable Thresh Disinfector has proved insufficient, and a full-sized Washington Lyon Disinfector has been ordered to be erected on the Moat House site.

HENDON RURAL DISTRICT.

Census 1901.

Area in acres	..	..	11,321
Inhabited houses	..	..	1,681
Total tenements	..	..	1,705
Population, 1891	..	..	7,305
„ 1901	..	..	8,647

Medical Officer of Health, B. Campbell-Gowan, L.R.C.P., M.R.C.S.

Estimated population, 8,740.

Births, 178; birth-rate 20·6.

Deaths, 82; death-rate, 9·37.

Deaths under 1 year, 12; infantile mortality-rate, 67·4.

Statistics.—The principal zymotic diseases caused 6 deaths, equivalent to a death-rate of 0·68 per 1,000 of population. In the two previous years the number of deaths from the same causes was 11 and 12 respectively.

Infectious Diseases Notification.—The Act has been in force since 1891. During the year 95 cases of dangerous infectious diseases were notified, as compared with 58, 32 and 36 in the three previous years.

Epidemics.—Scarlet fever was very prevalent, and two outbreaks occurred in Edgware and Pinner, in connection with schools, one an infant day school, which was closed for three weeks.

Isolation Hospital.—The sanction of the Local Government Board was obtained to a loan of £7,500, and the building proceeded with. The erection of a temporary structure for smallpox is under consideration if a suitable site can be obtained.

Sanitation.—It is proposed to build an improved slaughter-house at Great Stanmore in place of the one abolished last year. The refuse of Great Stanmore is used upon the sewage farm. The dust-collecting area in Pinner has been extended. Arrangements are being made for Edgware and Little Stanmore. The main sewers in Great Stanmore are completed, and the house connections made. The Harrow Weald sewer has been extended to Bushey Heath. The sewage farms are working satisfactorily, including the new automatic filter at Pinner. A number of dilapidated cottages are being repaired and improved.

SOUTH MIMMS RURAL DISTRICT.

Census 1901.

Area in acres ..	..	..	6,105
Inhabited houses	..	..	573
Total tenements	..	..	577
Population, 1891	..	..	2,422
„ 1901	..	..	2,671

Medical Officer of Health, W. Gruggen, L.R.C.P., D.P.H.
Estimated population, 2,671.

Births, 63 ; birth-rate, 23·5.

Deaths, 28 ; death-rate, 10·4. Exclusive of 13 non-residents.

Deaths under 1 year, 7 ; infantile mortality-rate, 111.

Statistics.—The zymotic diseases caused 4 deaths, equivalent to a rate of 1·4 per 1,000.

Infectious Diseases Notification.—The Act has been in force since 1st February, 1890. During the year, 10 cases of dangerous infectious diseases were notified, as compared with 7, 20, and 23 in the three preceding years.

Epidemics.—Three cases of smallpox occurred in one house.

Isolation Hospital.—The South Mimms Smallpox Hospital is in the District, and made use of, but there is accommodation for the isolation of other infectious diseases.

Sanitation.—The villages of South Mimms and Potter's Bar are supplied by the Barnet Gas and Water Company, and both villages are sewered, and the house connections in Potter's Bar are being rapidly made. The South Mimms sewage is treated on 8 acres of land near the village. Building bye-laws are in force in the District.

STAINES RURAL DISTRICT.

Census 1901.

Area in acres	19,754
Inhabited houses	4,534
Total tenements	4,597
Population, 1891	17,258
„ 1901	22,629

Medical Officer of Health, C. Dwight Morris, L.R.C.P.,
M.R.C.S.

Estimated population, 22,629.

Births, 694 ; birth-rate, 30·6.

Deaths, 312 ; death-rate, 13·7.

Deaths under 1 year, 100 ; Infantile mortality-rate, 144·1.

Statistics.—The principal zymotic diseases caused 36 deaths, equivalent to a rate of 1·6 per 1,000.

Infectious Diseases Notification.—The Act has been in force since 1890. During the year, 92 cases of infectious diseases were notified as compared with 140, 155 and 118 in the three previous years.

Epidemics.—Measles was epidemic in Shepperton, Feltham, and Cranford, successively, and necessitated the closure of the schools. Small-pox was absent; diarrhœa was prevalent.

Isolation Hospital.—Provision has been made for small-pox in conjunction with the Urban Districts of Staines and Sunbury, for the whole of the Staines Union, by the erec-

tion of a hospital, heated by hot-water pipes with the usual offices, etc., and accommodation for 12 patients, which can be extended, in the north-east corner of the union grounds at Stanwell, some 400 yards away from the main building and protected by a double row of barbed wire fencing some ten yards apart. Also a proper conveyance has been provided and kept in the enclosed area specially for small-pox.

Sanitation.—The South-West Suburban Water Company's main has been extended to Stanwell and to Ashford, and connections to the houses are being made. The Grand Junction Water Company are extending their main in Hanworth. There remain a number of questionable wells in various parts of the District. In such a scattered District a sewerage scheme is impracticable, but a scheme for the regular and systematic emptying and cleansing of cess-pools by the Council's staff is now on foot.

The bye-laws for buildings are now in full swing, and producing a beneficial change in construction. During the past year three miles of roads have been constructed and handed over to the Council. Five new estates have been opened up, and plans for 207 new buildings considered. The Bedfont and also the Feltham Schools have adopted the pail system of closets. The dust and refuse are removed from time to time from Ashford, Feltham, and Hanworth and tipped into old gravel pits. Decentralisation is taking place in the Metropolis, and the schemes for suburban traffic will very materially affect the District, so that it will be necessary to seriously consider the provision of houses for the working classes. The nuisance from the outfall of the sewage of the Staines Urban District, at West Bedfont in Stanwell parish, still continues.

UXBRIDGE RURAL DISTRICT.

Census, 1901.

Area in acres ..	..	..	23,415
Inhabited houses	..	..	3,439
Total tenements	..	..	3,573
Population, 1891	..	..	14,439
„ 1901	..	..	17,218

Medical Officer of Health, A. Charpentier, M.D.

Estimated population, 17,294.

Births, 501 ; birth-rate, 29·0.

Deaths, 228 ; death-rate, 13·4 (exclusive of 5 in the joint hospital, and 16 in the workhouse).

Deaths under 1 year, 59 ; infantile mortality rate, 117.

Statistics.—The principal zymotic diseases caused 27 deaths, equivalent to a rate of 1·5 per 1,000. The 3 deaths from small-pox were presumably non-resident.

Infectious Diseases Notifications.—The Act has been in force since January, 1890. During the year 104 cases of infectious diseases were notified, as compared with 91, 114, and 117 in the three previous years.

Epidemics.—Four cases of small-pox occurred in the District. Scarlet fever was epidemic in Yiewsley, and St. Matthew's Schools were closed for six weeks.

Isolation Hospital.—To the Joint Isolation Hospital the following number of patients were admitted:—

From Uxbridge Urban District	..	..	60
„ Southall, Norwood Urban District	..	..	45
„ Uxbridge Rural District	..	..	62
Total	..	..	<u>167</u>

The admission of the Southall patients causes overcrowding of the wards, which will be remedied when Southall has its own hospital.

The Joint Small-pox Hospital is situated at Yeading.

A proper steam disinfecting apparatus is urgently required at the Isolation Hospital.

Sanitation.—Consideration is directed to: (1) the drainage of Hayes, (2) the housing of the working classes, (3) the water supply of Ickenham and Northolt. The disposal of sewage in the several parishes is by bacterial treatment. Many houses are old, but there are no others for occupation. Two new railways proposed will probably increase the population and the number of houses available. A fat boiler's establishment caused a nuisance which was abated.

Enormous quantities of London refuse are deposited at Yiewsley; it is suggested that a prohibition order should be obtained. At the West Drayton National Schools the sanitary arrangements were very bad, and notice was served to abate the nuisance. "Yiewsley and Harefield were also unsatisfactory, and have been put into sanitary condition." The periodical inspections were made.

PART III.

STATISTICAL TABLES.

Note.—The Statistical Notes at the commencement of the Summaries must be read in conjunction with the L.G.B. Statistical Tables, especially for explanations of the numbers referring to Public Institutions.



L.G.B. Table I.

VITAL STATISTICS OF DISTRICTS OF COUNTY OF MIDDLESEX DURING 1901.

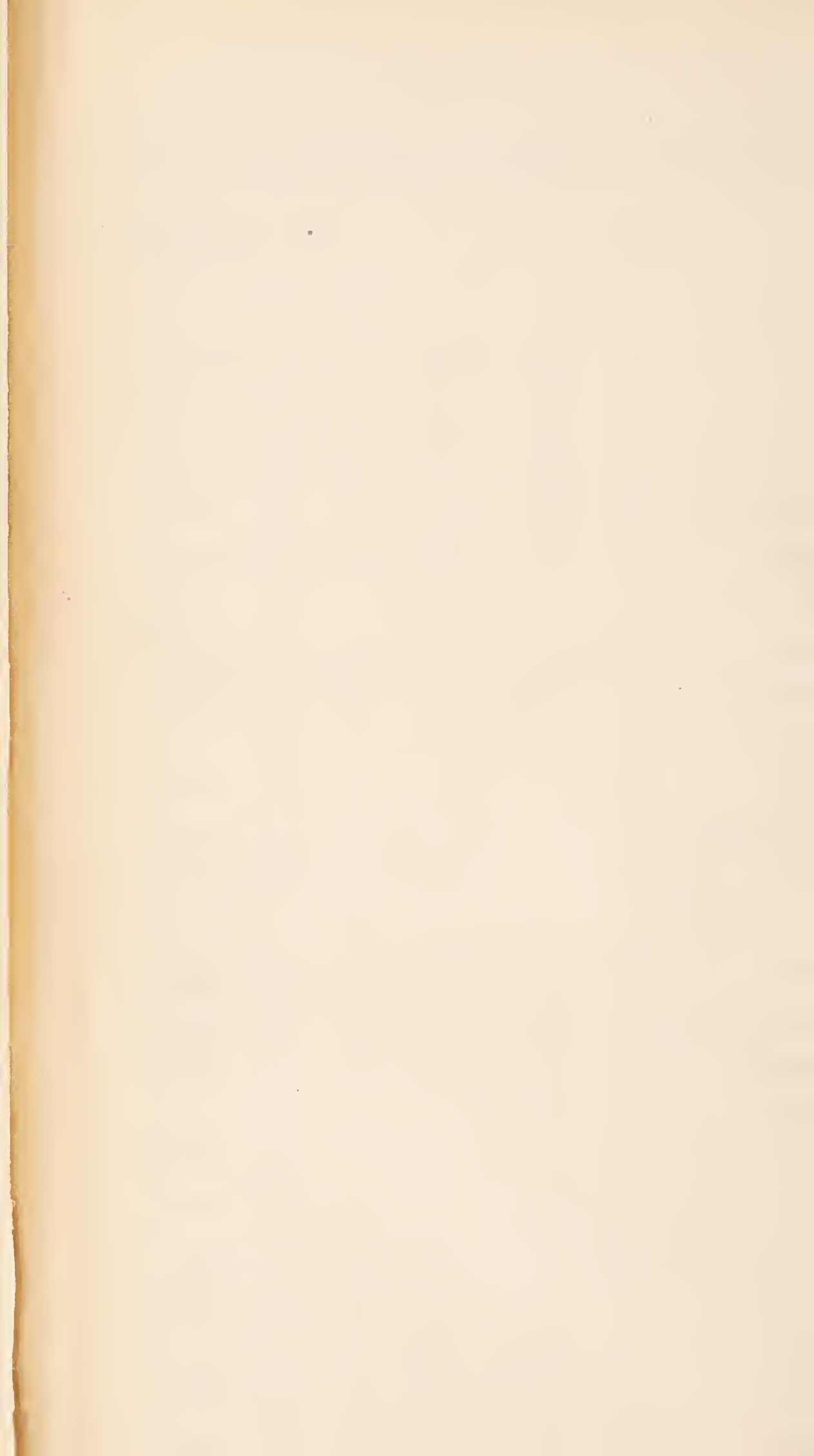
DISTRICTS.	Population estimated to Middle of Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.				TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT.	Deaths of Non-residents registered in Public Insti- tutions in the District.	Deaths of Residents regis- tered in Public Institu- tions beyond the District.	NETT DEATHS AT ALL AGES BELONGING TO THE DISTRICT.	
		Number.	Rate.*	Under 1 Year of Age.		At all Ages.					Number.	Rate.*
				Number.	Rate per 1,000 Births registered.	Number.	Rate.*					
1	2	3	4	5	6	7	8	9	10	11	12	13
URBAN												
Acton	37,744	1,211	32·0	206	170·1	..	..	..	..	..	519	13·7
Brentford	15,163	516	33·9	100	193·8	262	17·2	..	..	..	262	17·2
Chiswick	30,005	844	28·1	103	122	352	11·7	9	9	..	343	11·4
Ealing (Borough) .	33,274	708	21·2	81	114·4	370	11·1	..	..	..	370	11·1
Edmonton	44,911	1,640	36·5	271	165·2	787	15·2	233	183	70	674	15·0
Enfield	43,000	1,232	28·6	110	89·3	524	12·2	..	..	..	524	12·18
Finchley	23,805	540	22·7	53	98·1	211	8·9	..	12	20	219	9·2
Friern Barnet	8,816	242	27·4	21	86·7	99	11·2	199	..	6	105	11·9
Greenford	919	22	23·9	2	90·9	10	10·8	..	..	..	10	10·8
Hampton	6,850	180	26·2	27	150·0	75	10·9	..	3	1	73	10·6
Hampton Wick	2,606	44	16·9	5	113·0	38	14·5	..	5	3	36	13·8
Hanwell	10,757	316	29·3	50	158·2	121	11·2	..	..	..	121	11·2
Harrow-on-the-Hill ..	10,540	238	22·5	29	121·8	90	9·1	4	..	6	96	9·1
Hendon	21,953	616	28·0	80	129·8	..	..	..	..	..	234	10·6
Heston and Isleworth ..	30,959	874	28·5	140	160·1	678	21·9	232	191	..	487	15·7
Hornsey	73,500	1,511	20·5	127	84·0	597	8·1	5	2	22	617	8·4
Kingsbury	757	16	20·1	1	62·0	5	6·6	..	..	..	5	6·6
Southall-Norwood ..	10,477	360	34·3	65	180·5	165	15·7	..	..	3	168	16·0
Southgate	15,200	375	24·6	85	93·6	..	..	..	6	8	142	9·3
Staines	6,708	174	25·9	18	103·4	97	14·4	..	..	11	97	14·4
Sunbury	4,619	131	28·3	17	129·8	63	13·6	..	..	..	63	13·6
Teddington	14,029	359	25·6	40	111·0	130	9·2	5	2	6	134	9·5
Tottenham	103,243	3,179	30·0	431	135·5	1,550	15·0	274	40	..	1,510	14·6
Twickenham	21,000	576	27·4	68	118·0	254	12·1	15	5	..	249	11·8
Uxbridge	8,585	243	28·3	26	107·0	100	..	..	..	17	117	13·6
Wealdstone	6,550	204	31·3	24	117·3	55	8·5	..	..	..	55	8·5
Wembley	4,550	104	22·8	9	86·5	39	8·5	..	..	..	39	8·5
Willesden	116,089	3,670	31·7	456	124·2	1,325	11·4	51	9	213	1,529	13·17
Wood Green	34,350	939	27·3	125	133	398	11·5	11	2	1	397	11·55
RURAL.												
Hendon	8,740	178	20·6	12	67·4	82	9·37	..	..	..	82	9·37
South Mimms	2,671	63	23·5	7	111	41	15·3	15	13	4	28	10·4
Staines	22,629	694	30·6	100	144·1	312	13·7	44	..	..	312	13·7
Uxbridge	17,294	501	29·0	59	117	249	..	38	..	..	228	13·4

*Rates in Columns 4, 8 and 13 calculated per 1,000 of estimated population.

L.G.B.—TABLE II. (Decennial Table).

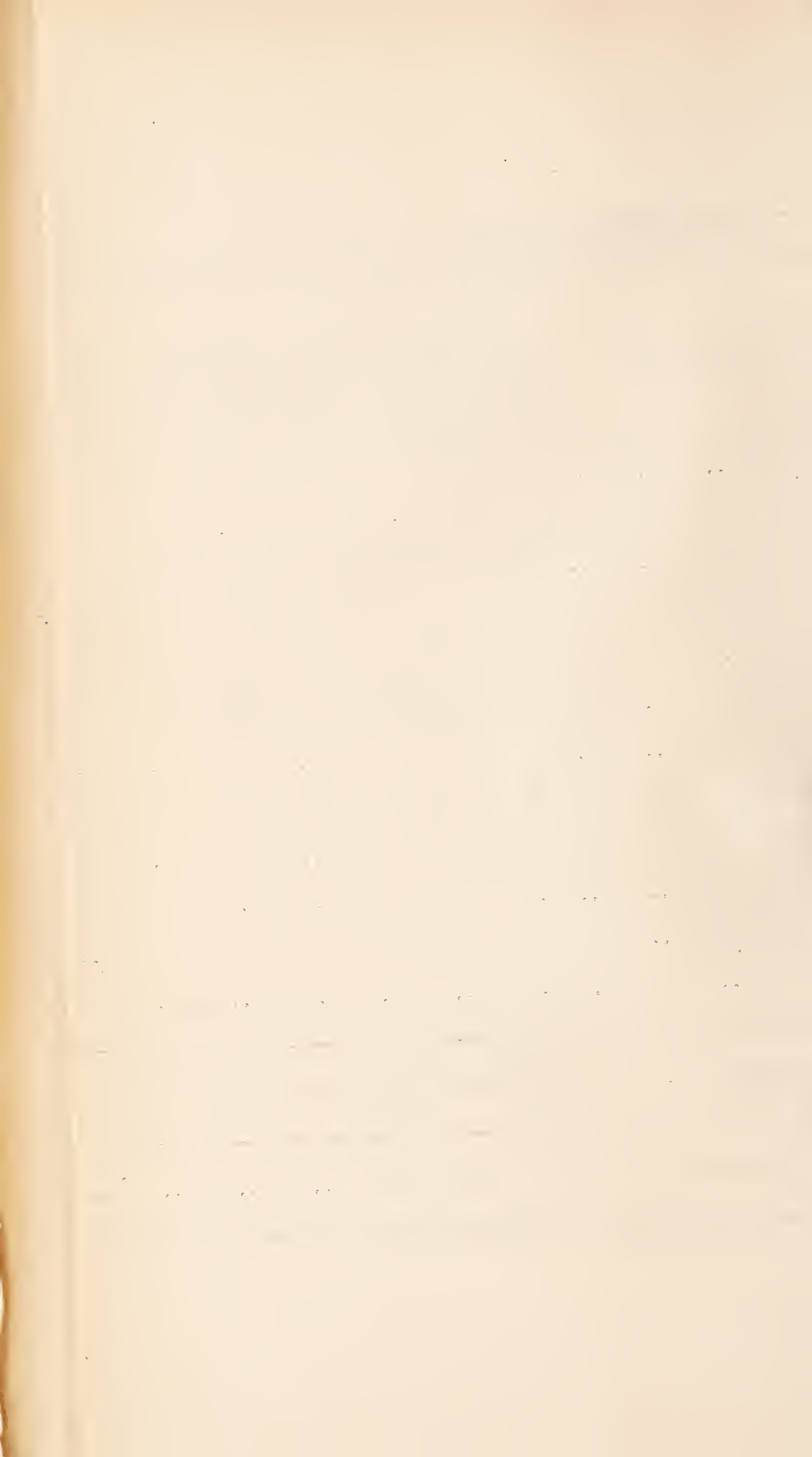
SHOWING THE CENSUS POPULATIONS, AND THE NUMBER OF DEATHS ANNUALLY DURING EACH OF THE PAST TEN YEARS IN EACH OF THE DISTRICTS AND THE COUNTY OF MIDDLESEX.

DISTRICTS.										Census Population, 1891.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	Average, 1891-1900.	1901.	Census Population, 1901.	Notes.
URBAN.																								
Acton	24,206	413	425	486	393	478	464	503	517	509	528	471	519	37,744										
Brentford	13,738	253	294	263	221	235	278	231	312	297	244	262	262	15,171										
Chiswick	21,963	345	392	338	313	382	360	348	452	408	392	373	352	23,809										
Ealing (Borough)	23,979	..	..	..	..	..	308	308	309	350	333	..	370	33,031										
Edmonton	25,381	..	593	529	515	424	500	542	606	688	757	..	674	46,899										
Enfield	31,536	..	..	..	..	..	..	..	528	613	614	..	524	42,738	Part transferred to Southgate Urban District, 1894.									
Finchley	16,647	..	..	..	..	..	..	..	..	..	..	..	219	22,126										
Friern Barnet	9,173	317	338	307	254	277	288	235	298	326	286	292	298	11,566	(Including Colney Hatch Asylum. Population, 2,750.)									
Greenford	..	..	3	9	10	10	6	8	9	23	11	..	10	819	Brentford Rural District previous to 1894.									
Hampton	5,822	83	85	80	60	78	67	80	83	80	72	76	75	6,813										
Hampton Wick.. .. .	2,378	25	29	31	22	28	20	31	33	28	26	27	36	2,606										
Hanwell	6,139	83	81	89	90	71	98	86	104	141	129	97	121	10,438										
Harrow-on-the-Hill	5,725	72	84	72	70	73	71	74	117	119	109	86	96	10,220	Extended to include part of Hendon Urban District in 1894.									
Hendon	15,843	..	..	..	..	..	..	..	..	..	..	..	..	22,450										
Heston and Isleworth	26,273	..	..	455	354	481	411	390	468	527	529	..	487	30,863	Part of Heston transferred to Southall-Norwood Urban District, 1894.									
Hornsey	44,205	489	508	547	495	563	522	528	577	682	617	552	617‡	72,056	‡Clerkenwell detached (6½ acres), added 1901.									
Kingsbury	..	..	..	..	..	..	..	..	..	..	†	..	757	757	†Separated from Wembley Urban District in 1900.									
Southall-Norwood	7,627	64	90	70	77*	93	91	106	121	136	166	101	168	13,200	*North Hyde area of Heston District added 1894.									
Southgate	10,970	157	182	148	131	161	117	158	150	182	147	153	142	14,993	Part transferred from Enfield Urban District, 1894.									
South Hornsey	16,892	..	..	..	..	..	..	..	..	..	..	..	..	..	In 1900 merged into Stoke Newington, County of London.									
Staines	5,060	54	72	94	61	93	57	64	62	87	90	73	97	6,688	In 1896 extended to include part of Stanwell Parish of Uxbridge Rural District.									
Sunbury.. .. .	..	..	..	..	..	..	44	65	79	63	63	62	63	4,544	Separated from Staines Rural District in 1894 under the Local Government Act.									
Teddington	10,052	134	140	163	138	178	136	156	147	163	211	156	134	14,037										
Tottenham	71,343	1,096	1,158	1,245	1,012	1,152	1,128	1,204	1,126	1,385	1,445	..	1,510	102,541										
Twickenham	16,027	250	250	230	207	235	203	256	266	276	295	246	249	20,991										
Uxbridge	8,206	..	..	..	..	..	..	..	..	..	..	..	..	8,585										
Wealdstone	..	..	..	..	..	49	31	35	47	59	55	46	55	5,901	Created out of Hendon Rural District in 1894.									
Wembley	..	..	..	..	..	..	28	33	41	57	45	..	39	4,519	Created out of Hendon Rural District in 1894, Kingsbury Urban District detached in 1900.									
Willesden	61,265	..	..	..	..	..	1,312	1,343	1,388	1,643	1,577	1,452	1,529	114,811										
Wood Green	25,831	366	392	369	331	374	380	384	420	415	395	382	397	34,233										
(Urban Total)	(506,281)	..	..	..	..	..	..	..	..	..	..	..	..	(741,149)										
RURAL.																								
Brentford	660	..	..	..	..	..	..	..	..	..	..	..	..	..	Became Greenford Urban District in 1894.									
Hendon	13,834	..	..	..	..	96	79	77	90	80	72	82	82	8,647	Wealdstone and Wembley with Kingsbury separated in 1894 under Local Government Act. Also part added to Harrow Urban District.									
South Mims	2,966	..	..	..	..	..	..	..	..	..	33	..	28	2,671	Small portion transferred to East Barnet Valley Urban District, Hertfordshire, in 1896.									
Staines	21,832	..	..	..	..	..	238	301	299	332	360	306	312	22,629	Sunbury Urban District separated in 1894.									
Uxbridge	14,439	232	228	220	220	242	210	228	255	268	220	232	228	17,218										
(Rural Total)	(53,731)	..	..	..	..	..	..	..	..	..	..	..	..	(51,165)										
(Middlesex)	(560,012)	..	..	..	..	..	..	..	..	..	..	..	..	(792,314)										



SHOWING THE CENSUS POPULATIONS, AND THE NUMBER OF DEATHS ANNUALLY DURING EACH OF THE PAST TEN YEARS IN EACH OF THE DISTRICTS AND THE COUNTY OF MIDDLESEX.

DISTRICTS.								Census Population, 1891.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	Average, 1891-1900.	1901.	Census Population, 1901.	Notes.
URBAN.																						
Acton	24,206	413	425	486	393	478	464	503	517	509	528	471	519	37,744								
Brentford	13,738	253	294	263	221	235	278	231	312	297	244	262	262	15,171								
Chiswick	21,963	345	392	338	313	382	360	348	452	408	392	373	352	28,809								
Ealing (Borough)	23,979	..	..	..	..	..	308	308	309	350	333	..	370	33,031								
Edmonton	25,381	..	593	529	515	424	500	542	606	688	757	..	674	46,899								
Enfield	31,536	..	..	..	..	..	..	..	528	613	614	..	524	42,738	Part transferred to Southgate Urban District, 1894.							
Finchley	16,647	..	..	..	..	..	..	..	..	..	..	..	219	22,126								
Friern Barnet	9,173	317	338	307	254	277	288	235	298	326	286	292	298	11,566	(Including Colney Hatch Asylum. Population, 2,750.)							
Greenford	..	..	3	9	10	10	6	8	9	23	11	..	10	819	Brentford Rural District previous to 1894.							
Hampton	5,822	83	85	80	60	78	67	80	83	80	72	76	75	6,813								
Hampton Wick	2,378	25	29	31	22	28	20	31	33	28	26	27	36	2,606								
Hanwell	6,139	83	81	89	90	71	98	86	104	141	129	97	121	10,438								
Harrow-on-the-Hill	5,725	72	84	72	70	73	71	74	117	119	109	86	96	10,220	Extended to include part of Hendon Urban District in 1894.							
Hendon	15,843	..	..	..	..	..	..	..	..	..	..	..	..	22,450								
Heston and Isleworth	26,273	..	..	455	354	481	411	390	468	527	529	..	487	30,863	Part of Heston transferred to Southall-Norwood Urban District, 1894.							
Hornsey	44,205	489	508	547	495	563	522	528	577	682	617	552	617†	72,056	†Clerkenwell detached (64½ acres), added 1901.							
Kingsbury	..	..	..	..	..	..	..	..	..	..	†	..	757	757	†Separated from Wembley Urban District in 1900.							
Southall-Norwood	7,627	64	90	70	77*	93	91	106	121	136	166	101	168	13,200	*North Hyde area of Heston District added 1894.							
Southgate	10,970	157	182	148	131	161	117	158	150	182	147	153	142	14,993	Part transferred from Enfield Urban District, 1894.							
South Hornsey	16,892	..	..	..	..	..	..	..	..	..	..	..	..	..	In 1900 merged into Stoke Newington, County of London.							
Staines	5,060	54	72	94	61	93	57	64	62	87	90	73	97	6,688	In 1896 extended to include part of Stanwell Parish of Uxbridge Rural District.							
Sunbury	..	..	..	..	..	..	44	65	79	63	63	62	63	4,544	Separated from Staines Rural District in 1894 under the Local Government Act.							
Teddington	10,052	134	140	163	138	178	136	156	147	163	211	156	134	14,037								
Tottenham	71,343	1,096	1,158	1,245	1,012	1,152	1,128	1,204	1,126	1,385	1,445	..	1,510	102,541								
Twickenham	16,027	250	250	230	207	235	203	256	266	276	295	246	249	20,991								
Uxbridge	8,206	..	..	..	..	..	..	..	..	..	..	..	..	8,585								
Wealdstone	..	..	..	..	..	49	31	35	47	59	55	46	55	5,901	Created out of Hendon Rural District in 1894.							
Wembley	..	..	..	..	..	..	28	33	41	57	45	..	39	4,519	Created out of Hendon Rural District in 1894, Kingsbury Urban District detached in 1900.							
Willesden	61,265	..	..	..	..	..	1,312	1,343	1,388	1,643	1,577	1,452	1,529	114,811								
Wood Green	25,831	366	392	369	331	374	380	384	420	415	395	382	397	34,233								
(Urban Total)	(506,281)	..	..	..	..	..	..	..	..	..	..	..	..	(741,149)								
RURAL.																						
Brentford	660	..	..	..	..	..	..	..	..	..	..	..	..	..	Became Greenford Urban District in 1894.							
Hendon	13,834	..	..	..	..	96	79	77	90	80	72	82	82	8,647	Wealdstone and Wembley with Kingsbury separated in 1894 under Local Government Act. Also part added to Harrow Urban District.							
South Mims	2,966	..	..	..	..	..	..	..	..	..	33	..	28	2,671	Small portion transferred to East Barnet Valley Urban District, Hertfordshire, in 1896.							
Staines	21,832	..	..	..	..	..	238	301	299	332	360	306	312	22,629	Sunbury Urban District separated in 1894.							
Uxbridge	14,439	232	228	220	220	242	210	228	255	268	220	232	228	17,218								
(Rural Total)	(53,731)	..	..	..	..	..	..	..	..	..	..	..	..	(51,165)								
(Middlesex)	(560,012)	..	..	..	..	..	..	..	..	..	..	..	..	(792,314)								



L.G.B. TABLE III (b).

COUNTY OF MIDDLESEX.—CASES OF NOTIFIABLE INFECTIOUS DISEASES REMOVED TO HOSPITAL DURING 1901.

[illegible]



L.G.B. TABLE III (c).

COUNTY OF MIDDLESEX.

AGES OF CASES OF INFECTIOUS DISEASE NOTIFIED IN DISTRICTS DURING 1901.

DISTRICTS.	At all ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	Notes.
URBAN.								
Acton	172	1	31	68	30	37	5	{ And chicken-pox 25 cases, 5 (under 1), 12 (1-5), 8 (5-15).
Brentford	77	..	25	18	10	24	..	And chicken-pox 13 cases, 5 (1-5), 8 (5-15).
Chiswick	177	3	31	64	24	49	6	And chicken-pox 26 cases.
Ealing .. .	181	1	20	84	32	41	3	
Edmonton	334	4	71	142	47	64	6	
Enfield	368							
Finchley	151	2	32	71	24	21	1	{ (20 of the cases of enteric fever (25-65) occurred in Colney Hatch Asylum), and measles 292 cases 31 (under 1), 138 (1-5), 109 (5-15), 9 (15-25), 5 (25-65).
Friern Barnet ..	119	3	35	35	5	40	1	
Greenford	8	..	..	4	1	3		
Hampton	37	1	8	15	4	8	1	
Hampton Wick ..	14	..	2	6	2	2	2	
Hanwell	134	1	25	74	8	26	..	Chicken-pox 18 cases, 1 (under 1), 10 (1-5), 7 (5-15).
Harrow-on-the-Hill ..	43	..	6	23	7	7		
Hendon	139	4	29	55	27	24	..	{ Of the 8 cases of enteric fever, 4 occurred in the Rockhill (Willesden) Infirmary, and 1 in the Central London (Cleveland Street) Asylum.
Heston and Isleworth	185	2	39	88	27	28	1	{ And measles 573 cases, 34 (under 1), 298 (1-5) 228 (5-15), 9 (15-25), 4 (25-65).
Hornsey	725	13	131	408	73	92	8	
Kingsbury	1	..	1					
Southall-Norwood ..	85	1	24	44	3	13		
Southgate	108	..	27	46	10	25		
Staines	83	..	16	49	10	8		
Sunbury	18	..	3	8	1	6		
Teddington	70	..	10	34	7	17	1	
Tottenham	1,133	28	319	482	131	166	7	
Twickenham	159							
Uxbridge								
Wealdstone	61	1	11	32	5	12		
Wembley	13	..	2	6	5			
Willesden	1,106	13	340	521	98	127	7	
Wood Green	221	3	47	102	35	34		
RURAL.								
Hendon	95	..	9	71	7	6	2	
South Mimms	10	..	..	3	3	4		
Staines	92	7	46	15	2	22		
Uxbridge	104							

L.G.B. TABLE IV. (a).

CAUSES OF DEATH IN DISTRICTS OF COUNTY OF MIDDLESEX DURING 1901.

CAUSES OF DEATH.	Acton.	Brentford.	Chiswick.	Ealing.	Edmonton.	Enfield.	Finchley.	Friern Barnet.	Greenford.	Hampton.	Hampton Wick.	Hanwell.	Harrow-on-the-Hill.	Hendon.	Heston and Isleworth.	Hornsey.	Kingsbury.	Southall-Norwood.	Southgate.	Staines.	Sunbury.	Teddington.	Tottenham.	Twickenham.	Uxbridge.	Waldstone.	Wembley.	Willesden.	Wood Green.	Hendon R.	South Mimms R.	Staines R.	Uxbridge R.			
Smallpox	..	..	1	..	3	..	1	..	..	..	..	..	..	..	2	..	..	..	1	..	..	..	8	..	..	..	..	..	..	..	..	3				
Measles	..	7	1	14	15	..	12	4	..	..	..	..	1	2	17	8	..	1	6	..	..	..	28	2	..	1	..	8	14	..	..	8	1			
Scarlet Fever	2	1	1	1	6	..	..	..	..	..	..	..	..	2	2	1	..	..	..	1	..	..	99	3	..	..	..	12	..	..	1	1				
Whooping Cough	16	7	4	9	3	..	1	1	..	2	..	2	3	6	18	14	..	5	..	4	2	1	21	9	2	4	1	57	12	1	1	3	6			
Diphtheria and Membranous Croup ..	6	2	5	6	8	..	2	2	..	1	1	2	1	1	9	8	..	1	1	9	..	1	89	3	2	..	..	53	5	3	..	4	1			
Croup	..	..	..	..	..	..	..	2	..	..	..	1	..	2	..	2	..	1	..	..	..	..	3	3	..	..	..	3	..	..	..	..				
Fever {	Typhus	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..				
	Enteric	1	2	..	2	5	..	3	6	..	1	..	..	2	2	..	3	..	..	..	1	1	2	29	2	1	2	2	10	3	2	..	2			
	Other Continued ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	1	..				
Epidemic Influenza	8	..	5	5	6	..	..	5	..	..	1	1	1	3	2	4	1	1	1	..	1	1	19	2	4	..	..	17	10	1	..	5	4			
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..				
Plague	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..				
Diarrhœa	69	38	22	9	71	..	6	3	..	4	1	8	7	16	32	6	1	24	12	4	3	8	111	14	4	7	..	123	36	..	3	17	18			
Enteritis	10	..	22	2	39	..	5	2	..	1	..	10	9	9	18	34	..	1	..	3	..	..	22	4	..	..	..	7	..	..	..	..	4			
Puerperal Fever	..	..	1	1	..	..	..	..	..	..	..	1	..	..	3	..	..	..	..	..	..	..	1	..	1	..	..	3	2	1	..	1	..			
Erysipelas	3	..	2	1	1	..	..	..	..	1	..	..	..	..	1	..	..	1	..	1	..	..	4	..	..	..	..	3	1	..	1	1	..			
Other Septic Diseases	2	..	..	..	17	..	3	1	..	..	..	..	..	4	1	2	..	..	..	..	..	..	1	2	2	..	..	5	..	..	..	..	2			
Phthisis	35	28	32	17	38	..	10	31	1	..	3	8	10	53	39	45	..	14	12	7	6	5	90	16	9	6	6	96	26	2	1	29	11			
Other Tubercular Diseases	9	..	12	13	37	..	6	4	..	1	..	7	3	13	10	18	..	4	..	2	..	5	69	5	1	1	..	47	13	1	1	..	5			
Cancer, Malignant Disease	29	..	16	23	29	..	20	9	..	3	4	5	8	26	19	47	..	3	9	8	..	8	80	9	3	3	4	87	22	8	3	..	12			
Bronchitis	47	55	41	33	39	..	15	11	2	7	2	12	2	22	46	45	..	18	10	1	8	16	90	17	14	1	..	104	40	8	1	37	30			
Pneumonia	36		..	34	18	54	..	10	19	..	3	1	10	..	37	56	45	..	15	7		3	..	1	137	18	1	8	3	107	21		4	..	..	7
Pleurisy	1		..	..	1	2	..	..	..	..	1	..	..	..	..	..	1	..	..	..		1	..	..	3	..	..	..	..	5	..		1	1	..	..
Other Diseases of Respiratory Organs ..	1	..	1	6	10	..	1	..	..	..	3	..	15	..	3	8	..	3	3	..	..	1	8	2	..	..	..	15	..	..	2	..	1			
Alcoholism, Cirrhosis of Liver	5	..	1	3	7	..	3	..	..	..	3	1	..	9	3	10	..	4	2	1	..	4	24	4	4	..	1	15	8	1	1	..	2			
Venereal Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	1	..	..	1	..	..	..	1	..	2	..	..	4	1	..	..	..	1			
Premature Birth	27	..	15	12	43	..	6	4	..	10	1	10	2	8	19	34	..	7	4	8	..	6	55	9	7	5	3	66	28	3	..	..	5			
Diseases and Accidents of Parturition ..	4	..	..	4	7	..	1	..	1	..	1	..	2	1	12	7	..	..	1	2	..	1	9	2	1	..	..	6	..	..	..	..	4			
Heart Diseases	40	20	34	39	43	..	25	17	2	7	2	9	..	36	38	71	..	20	14	4	1	15	96	26	15	3	4	117	32	10	3	24	34			
Accidents	17	12	6	9	26	..	6	1	2	5	3	4	1	14	13	14	..	1	3	5	1	7	57	5	..	2	1	64	4	4	..	5	11			
Suicides	1	..	2	4	4	..	1	1	..	1	3	..	..	3	2	11	..	3	1	1	..	..	6	1	2	..	1	9	4	..	..	..	2			
All Other Causes	150	90	94	138	161	..	82	181	2	28	9	92	24	141	120	178	3	41	54	31	40	48	396	91	27	12	13	495	114	32	10	174	84			
All Causes	519	262	352	370	674	524	219	304	10	76	38	121	90	413	487	617	5	168	142	97	63	130	1,550	249	102	55	39	1,538	397	82	28	312	240			

L.G.B. TABLE IV. (b).

AGES AT DEATH IN DISTRICTS OF COUNTY OF MIDDLESEX DURING 1901.

DISTRICTS.	All ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and up- wards.	Total Deaths in Public Institutions in District.	Notes.
URBAN.									
Acton	519	206	44	20	9	125	115	6	
Brentford	262	..	142	54	46	20			
Chiswick	352	103	36	8	17	105	83	9	
Ealing	370	81	37	19	22	104	107	24	
Edmonton	674	271	86	33	25	167	92	233	
Enfield	524								
Finchley	219	53	22	2	10	84	48	12	
Friern Barnet ..	304	21	17	10	25	160	71	205	
Greenford	10	2	..	1	1	4	2		
Hampton	76	27	5	1	3	19	21		
Hampton Wick ..	38	5	5	2	4	12	10		
Hanwell	121	50	11	7	5	23	25		
Harrow-on-the-Hill ..	90	31	9	5	5	23	17	4	
Hendon	413	80	28	17	10	160	118	187	{ of which 67 in Workhouse, 8 only belonging to Hendon. exclusive of 191 deaths of non- residents.
Heston and Isleworth	487	140	53	21	12	144	117	41	
Hornsey	617	129	47	19	23	210	189	5	
Kingsbury	5	2	1	..	..	1	1		
Southall-Norwood ..	168	65	19	5	3	49	27	215	
Southgate	142	35	7	3	2	41	54	..	Exclusive of 6 in M.A.B. Hospital.
Staines.. ..	97	18	9	9	5	33	23	..	{ Inclusive of 11 in Workhouse, Staines Rural.
Sunbury	63	5	..	1	2	15			
Teddington	139	40	15	5	7	30	33		
Tottenham	1,550	421	276	117	79	407	250	272	
Twickenham	249	68	24	5	8	72	72	15	
Uxbridge	102	26	12	4	8	31	21	16	
Wealdstone	55	24	7	3	1	15	5		
Wembley	39	9	1	1	2	17	9		
Willesden	1,538	476	203	95	57	437	270	51	
Wood Green	397	125	52	11	16	115	78	11	
RURAL.									
Hendon	82	12	8	1	3	34	24		
South Mimms	28	4	..	1	..	8	15	16	
Staines	312	17	36	7	11	67			
Uxbridge	249	59	13	12	7	85	75	38	

COUNTY OF MIDDLESEX.—SANITARY WORK, 1901.

NAME OF SANITARY DISTRICT.	Inspections.							Notices.					Dwelling Houses.					Houses let in separate Dwellings or Lodgings.			Common Lodging Houses.			Canal Bots used as Dwellings.			Movable Dwellings, Caravans, Tents. &c.			
	Complaints Received.	Cases of Infectious Disease Notified.	Number of Premises periodically Inspected.	Houses Inspected from House-to- House.	Total Number of Houses, Premises, &c., Inspected.	Total Number of Re-inspections after Order or Notice.	Total Number of Inspections and Re-inspections.	Letters Written.	Cautionary Notices Given.	Statutory Orders Issued.	Summonses Served.	Convictions Obtained.	Houses, Premises, &c., Cleansed, Repaired, &c.	Closed as Unfit for Habitation.	Re-opened after Repairs, Alterations, &c.	Demolished.	Illegal Underground Dwellings Vacated.	Number Registered under Bye-laws.	Periodical Frequency or Number of Inspections.	Number of Contraventions.	Number Registered under Bye-laws.	Periodical Frequency or Number of Inspections.	Number of Contraventions.	Number Registered under the Acts.	Periodical Frequency or Number of Inspections.	Number of Contraventions of Regulations.	Number Observed during the Year.	Number of Nuisances therefrom Abated.	Number Removed from District.	
URBAN.																														
Acton	122	197	117	137	1,400	3,170	4,570	882	596	42	6	6	256	..	..	..	..	..	..	..	1	24	..	..	..	..	29	..	29	
Brentford	83	90	38	..	1,732	693	2,463	411	249	54	3	3	39	..	..	..	1	..	..	..	7	109	1	289	54	11	23	..	..	
Chiswick	96	..	..	..	2,935	..	..	..	463	..	0	..	273	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Ealing	158	184	87	102	1,011	2,386	3,397	..	221	13	1	..	235	..	..	..	..	..	..	..	..	..	..	..	..	..	43	..	17	
Edmonton	61	334	152	361	5,140	3,755	8,895	1,411	1,956	182	8	8	106	3	..	..	..	6	93	1	1	104	..	..	76	8	352	46	261	
Enfield	86	364	208	427	1,944	6,412	8,356	1,527	2,289	349	..	..	149	..	..	..	..	..	..	1	..	0	0	0	0	82	..	82		
Finchley	50	151	128	204	538	554	1,092	208	39	437	..	..	66	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Friern Barnet	40	411	28	622	643	200	959	..	30	..	..	..	12	..	..	..	..	..	..	..	..	..	..	..	..	28	..	28		
Greenford	10	..	50	..	133	78	211	114	59	..	1	1	23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Hampton	49	44	39	101	502	2,491	2,993	110	209	22	8	6	33	6	0	4	0	No bye-laws			0	..	..	..	..	..	82	0	82	
Hampton Wick	..	..	..	293	..	..	..	..	9	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Hanwell	41	147	56	1,173	1,294	879	2,273	54	41	199	..	..	15	2	2	..	..	..	..	..	..	..	..	..	..	..	1	..	1	
Harrow-on-the-Hill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Hendon	213	135	123	284	410	530	1,530	25	223	15	..	..	50	..	..	..	..	300	..	..	..	..	..	..	..	..	6	..	6	
Heston and Isleworth	179	759	222	1,003	8,969	3,818	12,787	2,532	..	47	0	0	220	5	0	5	0	3	110	11	2	76	0	0	255	21	55	0	15	
Hornsey	192	725	133	141	1,435	5,376	6,811	numbers	379	76	6	6	171	5	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Kingsbury	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Southall-Norwood	192	84	48	756	1,017	216	1,017	242	..	..	..	..	35	..	..	..	..	3	..	..	0	..	..	0	125	20	..	3	..	
Southgate	60	459	190	100	459	1,553	2,012	378	50	{ 116 24 }	2	2	37	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	667	
Staines	..	83	..	25	108	108	216	69	..	..	..	..	..	..	..	7	..	..	..	..	1	..	..	0	..	..	..	..	..	
Sunbury	23	19	..	..	50	23	73	25	..	..	1	..	40	..	..	..	..	0	..	..	0	..	..	0	..	..	5	1	2	
Teddington	20	..	..	..	..	..	1,800	117	14	22	..	..	36	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Tottenham	857	1,204	..	889	2,246	9,974	12,720	2,420	2,549	920	..	..	442	..	..	..	..	..	..	..	6	350	..	..	..	..	360	..	98	
Twickenham	143	159	163	*	1,211*	700	1,671	397	145	312	0	0	127	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Uxbridge	10	..	50	650	770	57	827	25	48	..	..	..	20	1	..	..	..	..	..	..	4	20	..	324	..	..	..	..	..	
Wealdstone	24	61	..	91	..	..	176	52	73	4	..	..	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	20	
Wembley	10	13	25	0	80	44	124	30	0	25	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	116	..	116		
Willesden	489	1,106	338	3,218	5,151	1,970	7,121	1,710	1,560	246	2	2	..	2	2	0	0	..	..	..	..	..	..	..	weekly	7	..	..	..	
Wood Green	136	222	105	203	1,287	2,574	3,858	1,546	314	173	26	21	30	..	..	..	..	..	..	..	..	..	..	..	..	..	155	..	155	
RURAL.																														
Hendon	..	..	..	..	..	..	..	307	19	..	..	..	..	..	..	6	..	..	..	..	..	..	..	..	..	..	..	..	8	
South Mimms	..	..	..	..	86	..	..	..	33	..	..	..	19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Staines	40	92	..	..	..	..	969	239	203	104	2	1	27	6	..	7	..	..	..	..	..	..	..	..	..	39	39	39	39	
Uxbridge	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	

COUNTY OF MIDDLESEX.—SANITARY WORK, 1901.

NAME OF SANITARY DISTRICT.	Schools.			Workshops and Work-places.			Hand-Laundries.			Bakehouses.			Slaughter-houses.			Cow-sheds.			Dairies and Milk- shops.			Unsound Food.		Adulterated Food.		Offensive trades.			Mortuaries.		
	Number in District.	Periodical Frequency or Number of Inspections.	Number found defective.	Number in District.	Periodical Frequency or Number of Inspections.	Contraventions of Factory Acts.	Number in District.	Periodical Frequency or Number of Inspections.	Contraventions of Factory Acts.	Number in District.	Periodical Frequency or Number of Inspections.	Contraventions of Factory Acts.	Number on Register.	Periodical Frequency or Number of Inspections.	Contraventions of Bye-laws.	Number on Register.	Periodical Frequency or Number of Inspections.	Contraventions of Bye-laws.	Number on Register.	Periodical Frequency or Number of Inspections.	Contraventions of Bye-laws.	Animals seized.	Articles or parcels seized.	Samples taken.	Found adulterated.	Number of premises in District.	Periodical Frequency or Number of Inspections.	Contraventions of Bye-laws.	Accommodation.	Number of bodies received.	
URBAN.																															
Acton ..	22	..	..	59	73	..	255	95	73	23	79	..	4	32	..	8	24	..	68	131	1	..	74	..	..	..	..	..	4	39	
Brentford ..	6	53	..	38	27	2	5	7	..	23	frqtlly.	..	8	23	..	7	23	..	41	frqtlly.	..	..	11	..	..	1	21	..	3	28	
Chiswick ..	..	..	..	..	..	..	..	..	..	18	..	..	6	..	..	*	..	..	34*	..	..	..	..	79	1	..	..	..	..	..	
Ealing ..	..	..	..	..	..	..	17	hf.-yrly.	..	22	qrtrly.	..	5	qrtrly.	..	7	qrtrly.	..	26	qrtrly.	..	..	..	..	..	..	..	..	..	..	
Edmonton ..	16	mthly.	..	17	53	7	23	64	2	30	66	1	7	97	..	8	20	1	67	186	..	..	14	..	..	..	..	..	1	..	
Enfield ..	25	twice	7	49	3 times	15	7	3 times	4	32	3 times	4	16	3 times	4	38	twice	14	41	twice	5	..	..	..	..	..	..	..	..	..	
Finchley ..	23	..	..	..	..	..	9	..	..	13	..	..	9	..	..	8	..	..	13	..	..	..	..	..	..	..	..	..	..	..	
Friern Barnet ..	5	24	..	1	1	..	3	12	..	7	20	..	2	8	..	2	32	..	9	24	..	..	..	15	..	..	..	..	..	..	
Greenford ..	1	2	..	..	..	..	..	..	..	..	..	..	8	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Hampton ..	5	mthly.	1	5	yrly.	0	4	yrly.	0	9	hf.-yrly.	4	5	hf.-yrly.	2	7	hf.-yrly.	4	5	hf.-yrly.	1	0	0	0	0	1	3	1	2	10	
Hampton Wick ..	2	frqtlly.	..	2	frqtlly.	..	..	..	..	2	frqtlly.	..	2	frqtlly.	2	2	frqtlly.	..	2	frqtlly.	..	..	..	..	..	..	..	..	2	5	
Hanwell ..	6	3	..	..	10	..	14	hf.-yrly.	2	7	qrtrly.	1	1	4	1	5	hf.-yrly.	..	11	hf.-yrly.	..	..	..	..	..	..	..	..	1	..	
Harrow-on-the-Hill ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Hendon..	12	frqtlly.	..	2	hf.-yrly.	..	67	twice	..	13	twice	..	10	twice	..	23	twice	..	30	twice	..	..	..	..	..	..	..	..	1	17	
Heston and Isleworth.	40	65	3	37	107	2	14	168	1	36	412	3	18	468	0	20	250	1	52	1,449	2	48	2	0	0	1	47	1	2	10	
Hornsey ..	17	mthly.	5	..	..	..	..	..	..	38	qrtrly.	..	10	mthly.	..	8	mthly.	..	47	qrtrly.	..	..	1	..	..	..	..	..	6	51	
Kingsbury ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Southall-Norwood ..	6	twice	0	13	twice	0	..	..	..	8	twice	0	12	twice	1	6	twice	6	8	twice	0	24	..	14	..	0	..	..	ample.	..	
Southgate ..	23	..	0	..	..	..	..	..	..	11	frqtlly.	..	7	frqtlly.	..	11	frqtlly.	..	18	frqtlly.	..	..	..	..	..	..	..	..	1	4	
Staines ..	5	4	..	..	..	..	1	1	..	..	..	..	3	2	..	11	qrtrly.	1	16	qrtrly.	..	..	..	..	..	..	..	..	ample.	..	
Sunbury ..	3	..	0	1	..	0	5	..	0	3	..	1	2	..	0	7	..	0	4	..	0	..	..	..	..	0	..	..	1	1	
Teddington ..	..	29	..	..	..	..	..	..	..	..	..	..	..	25	..	..	42	4	42	..	..	..	..	..	..	..	..	..	..	..	
Tottenham ..	76	..	..	86	174	..	33	86	..	62	140	..	17	282	..	19	276	..	167	574	..	..	8	..	..	..	..	..	5	176	
Twickenham ..	16	occasly.	0	27	occasly.	0	15	frqtlly.	0	18	frqtlly.	2	12	frqtlly.	1	9	frqtlly.	0	22	frqtlly.	0	0	4	0	0	0	0	0	4	14	
Uxbridge ..	7	16	..	..	..	..	4	4	..	7	frqtlly.	..	5	60	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Wealdstone ..	1	1	..	..	..	..	..	..	..	5	occasly.	..	3	qrtrly.	..	5	qrtrly.	..	12	qrtrly.	..	..	..	..	..	..	..	..	..	..	
Wembley ..	2	several	0	5	several	0	2	several	0	5	several	0	3	several	0	5	several	0	4	several	0	0	0	0	0	0	1	twice	0	0	0
Willesden ..	29	..	1	35	yrly.	11	121	yrly.	50	61	yrly.	35	10	qrtrly.	4	8	yrly.	6	76	yrly.	6	0	6	..	..	..	..	..	0	0	
Wood Green ..	..	..	..	24	50	..	19	56	..	16	45	..	5	116	..	5	43	1	36	120	..	..	3	..	..	..	..	..	3	31	
RURAL.																															
Hendon..	11	16	..	1	5	..	..	..	..	10	..	..	6	15	1	11	12	..	11	12	..	..	..	..	..	..	..	..	0	..	
South Mimms ..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Staines ..	15	occasly.	..	..	..	..	..	..	..	17	occasly.	..	..	..	..	..	hf.-yrly.	..	..	hf.-yrly.	..	..	..	..	..	..	..	..	..	..	
Uxbridge ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	

COUNTY OF MIDDLESEX.—SANITARY WORK, 1901.

NAME OF SANITARY DISTRICT.	Disinfection.			Dust.					Dampness.								Sundry Nuisances Abated.							Contagious Diseases of Animals.			Inspector of Nuisances.	
	Rooms fumigated.	Rooms stripped and cleansed.	Articles disinfected or destroyed.	Dust-bins repaired.	New bins provided.	Movable receptacles substituted for fixed.	Periodical frequency of dust removal.	Number of complaints of non- removal received.	Roofs repaired, &c.	Guttering and rain-pipes repaired, &c.	Gardens, Areas, &c., levelled and drained.	Yards paved and drained.	Surface adjoining houses paved.	Dry areas provided.	Ventilation below floor provided.	Basements rendered impervious.	Overcrowding.	Smoke.	Accumulations of refuse.	Foul ditches, ponds, &c., and stagnant water.	Foul pigs and other animals.	Other nuisances.	Outbreaks	Animals infected.	Animals destroyed.			
URBAN.																												
Acton	346	..	15 tons	7	196	..	weekly	255	31	123	46	28	28	2	4	..	4	7	20	..	19	..	..	..	..	..	M. W. Kinch.	
Brentford	43	92	157	63	25	..	weekly	3	4	10	..	12	..	..	..	..	8	..	25	2	..	..	..	..	..	..	Mr. Grimsley.	
Chiswick	80	..	..	8	44	..	..	108	..	..	..	..	..	..	..	..	3	..	11	..	8	..	..	..	..	..	J. H. Clarke.	
Ealing	151	77	1,779	..	30	23	weekly	57	37	28	33	25	76	..	6	8	7	..	55	7	8	refuse 327 36	}	..	..	..	R. J. Butland.	
Edmonton	284	107	2,430	16	45	..	weekly	89	113	87	1	143	4	..	..	..	26	4	17	12	15			..	..	..	..	A. J. Munro.
Enfield	245	79	3,259	..	116	..	{ loads 4,761 }	..	81	84	3	140	..	..	3	..	31	3	41	9	48			..	..	..	..	F. C. Stockman.
Finchley	159	23	..	..	76	..	..	..	28	6	..	22	..	..	..	..	4	..	3	2	5			..	..	..	..	
Friern Barnet	200	60	200	..	50	10	ftnghtly.	100	25	20	..	10	6	..	..	..	4	..	19	22	14	..	..	..	..	..	W. H. Read.	
Greenford	18	..	34	..	12	12	..	..	21	24	..	..	..	..	..	..	4	..	19	22	14	..	..	..	..	..	A. Shail.	
Hampton	33	41	0	0	24*	*	weekly	2	6	18	8	1	0	0	3	0	3	1	35	0	4	84	0	0	0	0		
Hampton Wick	16	..	..	..	5	..	{ weekly & ftnghtly. }	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Hanwell	35	26	318	..	169	40	weekly	9	18	26	8	3	7	3	2	7	8	1	2	7	15	14	..	..	..	..		
Harrow-on-the-Hill	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Hendon	183	50	quantity	15	31	14	weekly	31	18	12	..	..	..	..	..	3	4	1	17	3	2	24	3	60	45	..		
Heston and Isleworth	597	155	17,910	12	109	0	ftnghtly.	79	77	168	2	97	9	12	33	1	30	4	13,020	5	4	22	3	..	..	..	Mr. Smith.	
Hornsey	631	256	9,843	4	28	..	weekly	110	25	43	3	19	8	..	3	4	2	3	59	6	9	137	..	..	..	..		
Kingsbury	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Southall-Norwood	68	25	1 lot	..	..	..	..	..	12	6	..	..	..	..	..	..	3	..	15	5	3	..	..	..	..	..	H. T. Baxter.	
Southgate	130	91	489	..	40	..	weekly	30	8	20	4	57	..	2	21	..	..	1	13	8	9	2	..	..	..	..	J. W. H. Brown.	
Staines	44	44	sundry	..	1	297	weekly	..	..	..	..	5	..	..	..	..	..	3	52	..	2	..	..	2	2	..	Harold Coales.	
Sunbury	10	10	several	..	6	3	weekly	2	8	8	..	..	..	..	..	..	..	..	1	..	..	..	..	2	2	..		
Teddington	43	43	..	42	76	..	..	..	17	59	..	..	..	..	..	..	..	..	17	6	5	12	..	..	..	..		
Tottenham	981	..	6,997	115*	*	..	weekly	632	264	259	..	96	972	..	19	..	10	6	46	..	22	25	..	..	..	..	Jas. O'Connor	
Twickenham	99	55	several	4	91	0	weekly	154	37	36	0	14	0	0	13	0	5	5	20	7	90	60	1	1	1	..		
Uxbridge	120	..	..	4	60	..	ftnghtly.	3	..	..	..	..	1	..	..	..	..	12	..	..	..	..	..	..	..	..	Mr. Williams.	
Wealdstone	..	..	..	..	..	..	..	..	3	2	..	8	20	..	9	..	2	1	16	5	4	5	..	..	..	..	Mr. Walker.	
Wembley	7	4	1	0	23	23	ftnghtly.	3	0	0	0	..	0	0	0	0	0	1	1	1	3	24	0	0	0	..		
Willesden	864	..	..	37	54	11	{ weekly h. to h. }	83	..	..	..	..	..	..	..	..	23	2	49	7	..	..	..	..	..	..		
Wood Green	187	145	2,251	..	170	..	weekly	..	34	36	..	12	64	..	8	1	8	10	68	6	11	30	0	0	0	0	A. E. Adams.	
RURAL.																												
Hendon	10	4	..	..	..	5	weekly	37	24	38	5	..	..	..	..	..	11	9	1	3	..	..	..	..	..	..		
South Mimms	4	4	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	8	..	..	..	..	..	..		
Staines	71	38	many	many	..	many	weekly	..	11	11	..	..	..	..	..	..	..	..	85	9	26	68	..	..	..	..	Mr. Jacob.	
Uxbridge	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		

COUNTY OF MIDDLESEX.—ADOPTIVE ACTS, BYE-LAWS, AND REGULATIONS IN FORCE, 1900.

Sanitary Districts.						Adoptive Acts.				Compulsory.		Bye-laws.																Regulations.								
U = Urban Authorities. R = Rural ,, X = Adopted. ⊕ = Under consideration. 0 = Not adopted. .. = No information.										U. & R.	U.	Permissive.								Urban Authorities.								R.	Permissive.							
										Urban and Rural Authorities.								Urban Authorities.								Urban and Rural Authorities.										
						Infectious Diseases (Notifi- cation) Act, 1889.	Infectious Diseases (Pre- vention) Act, 1890.	Public Health Act Amend- ment Act, 1890, Part III.	Housing of the Working Classes Act, 1890, Part III.	Common Lodging Houses. (P.H.A., 1875, Sec. 80.)	Slaughterhouses. (P.H.A., 1875, Sec. 169.)	Cleansing, &c., and removal of refuse. (P.H.A., 1875, Sec. 44.)	Houses let in Lodgings. (P.H.A., 1875, Sec. 90.)	Tents, Vans, Sheds, &c. (H.W.C.A., 1885, Sec. 9 (2).)	Hop-pickers' Lodgings. (P.H.A., 1875, Sec. 314.)	Fruit, &c., Pickers' Lodgings. (F.P.L.A., 1882.)	Public Mortuaries. (P.H.A., 1875, Sec. 141.)	Public Cemeteries. (P.H.A., 1879, Sec. 2.)	Public Lodging Houses. (H.W.C.A., 1890, Sec. 62.)	Prevention of Nuisances. (P.H.A., 1875, Sec. 44.)	Keeping of Animals. (P.H.A., 1875, Sec. 44.)	Offensive Trades. (P.H.A., 1875, Sec. 113.)	New Streets and Buildings. (P.H.A., 1875, Sec. 157; and P.H.A.A.A., 1890, Sec. 23.)	Removal of Offensive Matters and House Refuse. (P.H.A.A.A., 1890, Sec. 26.)	Public Conveniences. (P.H.A.A.A., 1890, Sec. 20.)	Public Baths and Washhouses. (B. & W.A., 1864, Sec. 34.)	Swimming Baths. (B. & W.A., 1878.)	Open Spaces. (O.S.A., 1887, Sec. 5.)	Markets. (P.H.A., 1875, Sec. 167.)	Buildings, Limited Powers. (P.H.A.A.A., 1890, Sec. 23 (3).)	Communications between Drains and Sewers. (P.H.A., 1875, Sec. 21.)	Removal of Patients. (P.H.A., 1875, Sec. 125.)	Management of P.M.X. Rooms. (P.H.A., 1875, Sec. 143.)	Dairies, Cowsheds, and Milk- shops. (D.C.&M. Order, 1885, Art. 13.)		
URBAN.																																				
Acton ..	..	..	..	..	..	X	..	..	..	..	..	..	0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Brentford ..	..	..	..	..	..	X	..	..	..	..	..	..	0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Chiswick ..	..	..	..	..	..	X	..	..	..	..	..	..	0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Ealing..	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Edmonton ..	..	..	..	..	..	X	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Enfield ..	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Finchley ..	..	..	..	..	..	X	X	..	..	X	X	X	X	..	..	..	..	..	X	X	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Friern Barnet ..	..	..	..	..	..	X	X	X	..	X	X	X	X	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	X	
Greenford ..	..	..	..	..	..	X	X	..	..	..	..	0	..	..	..	..	..	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	X	
Hampton ..	..	..	..	..	..	X	X	X	..	..	..	0	..	..	..	..	..	..	X	X	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	
Hampton Wick ..	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Hanwell ..	..	..	..	..	..	X	X	..	X	X	X	⊕	..	..	..	..	..	..	X	X	..	..	X	..	..	..	..	..	..	..	..	X	..	X	..	
Harrow-on-the-Hill ..	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Hendon ..	..	..	..	..	..	X	..	..	..	..	..	X	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Heston and Isleworth ..	..	..	..	..	..	X	..	..	X	..	..	X	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	X	
Hornsey ..	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Kingsbury ..	..	..	..	..	..	X	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	X	
Southall-Norwood ..	..	..	..	..	..	X	X	X	..	X	X	X	X	..	..	..	..	..	..	X	X	..	X	..	..	..	..	..	..	..	..	..	..	..	X	
Southgate ..	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Staines ..	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Sunbury ..	..	..	..	..	..	X	..	..	..	..	..	0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Teddington ..	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Tottenham ..	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Twickenham ..	..	..	..	..	..	X	..	..	..	..	..	0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Uxbridge ..	..	..	..	..	..	X	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	X	..	
Wealdstone ..	..	..	..	..	..	X	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	X	..	
Wembley ..	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Willesden ..	..	..	..	..	..	X	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Wood Green ..	..	..	..	..	..	X	..	..	..	..	..	0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
RURAL.																																				
Hendon ..	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	X	
South Mimms ..	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	X	..	X	..	
Staines ..	..	..	..	..	..	X	..	X	..	0	0	0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	X	..	..	..	
Uxbridge ..	..	..	..	..	..	X	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	

